



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date July 15, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO THIN FILE(2)

SAL 000009110

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 41 Lot No. of Tube 106
3. Sampling Date 7/15/77 Time Started 6⁴⁵ AM Time Ended 2³⁰ PM
Elapsed Time _____ HOURS
4. Atm. Press. 771.4 mmHg, Temp. 26.7 °C.
5. Area the Sample Represents POWER PLANT, OPERATOR
6. Name of Person Who Took the Sample BILLIE JACKSON
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 27.8 °C.
Pump Flow Rate 49 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 42 Lot No. of Tube 106
3. Sampling Date 7/15/77 Time Started 6⁴⁵ AM Time Ended 2¹⁰ PM
Elapsed Time _____ HOURS
4. Atm. Press. 771.4 mmHg, Temp. 26.7 °C.
5. Area the Sample Represents POWER PLANT, FIREMAN
6. Name of Person Who Took the Sample WILFRED ODELL
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 27.8 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

SAL 000009112

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-BZ- 43 Lot No. of Tube 106
3. Sampling Date 7/15/77 Time Started 6⁴⁵ AM Time Ended 2³⁰ PM
Elapsed Time _____ HOURS
4. Atm. Press. 771.4 mmHg, Temp. 31.1 °C.
5. Area the Sample Represents POWER PLANT, WATER
TREATER
6. Name of Person Who Took the Sample ROLAND KOONCE
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 27.8 °C.
Pump Flow Rate 53 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

SAL 000009113

Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date July 11, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.

We request an additional supply of charcoal tubes.


J. J. Mangelinkx

1b
CC: MEO-THM-FILE(2)

SAL 000009114

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 38 Lot No. of Tube 106
3. Sampling Date 7/11/77 Time Started 7⁰⁰ AM Time Ended 2³⁰ PM
Elapsed Time 7.5 HOURS
4. Atm. Press. 771.0 mmHg, Temp. 27.8 °C.
5. Area the Sample Represents COMBINATION UNIT, FOREMAN
6. Name of Person Who Took the Sample AMON GENTRY
7. Pump Calibration Data: Atmos. Press. 768.9 mmHg, Temp. 26.1 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 39 Lot No. of Tube 106
3. Sampling Date 7/11/77 Time Started 6⁴⁵ AM Time Ended 2³⁰ PM
Elapsed Time 4.8 HOURS
4. Atm. Press. 771.0 mmHg, Temp. 27.8 °C.
5. Area the Sample Represents COMBINATION UNIT, OPERATOR
6. Name of Person Who Took the Sample DEWEY MORROW
7. Pump Calibration Data: Atmos. Press. 769.9 mmHg, Temp. 26.1 °C.
Pump Flow Rate 52 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009116

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-82- 40 Lot No. of Tube 106
3. Sampling Date 7/11/77 Time Started 6⁴⁵ AM Time Ended 2³⁰ PM
Elapsed Time 4.8 HOURS
4. Atm. Press. 771.0 mmHg, Temp. 27.8 °C.
5. Area the Sample Represents COMBINATION UNIT,
1ST CONTROL MAN
6. Name of Person Who Took the Sample ALFRED CAESAR
7. Pump Calibration Data: Atmos. Press. 768.9 mmHg, Temp. 26.1 °C.
Pump Flow Rate 49 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009117



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date July 7, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO-THM-FILE(2)

SAL 000009118

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DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 35 Lot No. of Tube 106
3. Sampling Date 7/7/77 Time Started 7⁰⁰ AM Time Ended 2⁴⁵ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 768.6 mmHg, Temp. 26.7 °C.
5. Area the Sample Represents PUMPHOUSE, FOREMAN
6. Name of Person Who Took the Sample NOAH KINNEY
7. Pump Calibration Date: Atmos. Press. 769.5 mmHg, Temp. 25.6 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

SAL 000009119

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-3Z- 34 Lot No. of Tube 106
3. Sampling Date 7/7/77 Time Started 7⁰⁰ AM Time Ended 2⁴⁵ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 768.6 mmHg, Temp. 26.7 °C.
5. Area the Sample Represents PUMPHOUSE, OPERATOR
6. Name of Person Who Took the Sample SHELBY BARTELS
7. Pump Calibration Data: Atmos. Press. 769.5 mmHg, Temp. 25.6 °C.
Pump Flow Rate 43 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 37 Lot No. of Tube 100
3. Sampling Date 7/7/77 Time Started 7⁰⁰ AM Time Ended 2⁴⁵ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 748.6 mmHg, Temp. 26.7 °C.
5. Area the Sample Represents PUMPHOUSE, BLENDER
6. Name of Person Who Took the Sample WILLIAM JONES
7. Pump Calibration Data: Atmos. Press. 749.5 mmHg, Temp. 25.6 °C.
Pump Flow Rate 58 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date June 21, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: NEO-THM-FILE(2)

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82-13 Lot No. of Tube 106
3. Sampling Date 6-20-77 Time Started 6:57 AM Time Ended 2:40 PM
Elapsed Time 463 MINUTES
4. Atm. Press. 768.5 mmHg, Temp. 29.0 °C.
5. Area the Sample Represents PRODUCT FRACTIONATION
UNIT, #2 UNIT, OUTSIDE MAN
6. Name of Person Who Took the Sample GERALD GEEB
7. Pump Calibration Data: Atmos. Press. 768.5 mmHg, Temp. 25.6 °C
Pump Flow Rate 52 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. TSL Analysis Data:

SAL 000009123

2)

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82- 14 Lot No. of Tube 106
3. Sampling Date 6-20-77 Time Started 7⁰² AM Time Ended 2:42 PM
Elapsed Time 460 MINUTES
4. Atm. Press. 768.5 mmHg, Temp. 29.0 °C.
5. Area the Sample Represents #2 CRUDE UNIT,
OUTSIDE MAN
6. Name of Person Who Took the Sample WILLARD YOUNG
7. Pump Calibration Data: Atmos. Press. _____ mmHg, Temp. 25.6 °C
Pump Flow Rate 44 cc's/min.
8. Remarks: Include any pertinent information such as soot's, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009124

3

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-B2-15 Lot No. of Tube 106
3. Sampling Date 6-20-77 Time Started 7⁰⁰ AM Time Ended 2⁵⁵ PM
Elapsed Time 475 MINUTES
4. Atm. Press. 768.5 mmHg, Temp. 24.4 °C.
5. Area the Sample Represents RESEARCH OCTANE ENGINE
OPERATOR
6. Name of Person Who Took the Sample LAWRENCE GUZZINO
7. Pump Calibration Data: Atmos. Press. 768.5 mmHg, Temp. 25.6 °C
Pump Flow Rate 58 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date June 16, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009126

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82-10 Lot No. of Tube 106
3. Sampling Date 6-15-77 Time Started 8⁴⁵ AM Time Ended 1²² PM
Elapsed Time 297 MINUTES
4. Atm. Press. 768.6 mmHg, Temp. 27.8 °C.
5. Area the Sample Represents PUMPHOUSE, EAST TANK FARM
REX BROUSARD
6. Name of Person Who Took the Sample J.J. MANGELINKX
7. Pump Calibration Data: Atmos. Press. 768.6 mmHg, Temp. 26.3 °C
Pump Flow Rate 55 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-B2-11 Lot No. of Tube 106
3. Sampling Date 6-15-77 Time Started 8³⁷ AM Time Ended 2⁰³ PM
Elapsed Time 326 MINUTES
4. Atm. Press. 768.6 mmHg, Temp. 27.8 °C.
5. Area the Sample Represents #1 CTU, ALKY, OUTSIDE MAN
LESTER ORPHY
6. Name of Person Who Took the Sample J.J. MANGELINKX
7. Pump Calibration Data: Atmos. Press. 768.6 mmHg, Temp. 26.3 °C
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009128

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

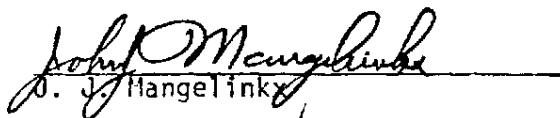
1. Plant: LAKE CHARLES
2. Sample ID: LL - 82-12 Lot No. of Tube 106
3. Sampling Date 6-15-77 Time Started 8³⁸ AM Time Ended 2⁰³ PM
Elapsed Time 325 MINUTES
4. Atm. Press. 768.6 mmHg, Temp. 27.8 °C.
5. Area the Sample Represents WICU, THERMAL, OUTSIDE MAN,
MARK MITCHELL
6. Name of Person Who Took the Sample J.J. MANGELINKX
7. Pump Calibration Data: Atmos. Press. 768.6 mmHg, Temp. 24.3 °C
Pump Flow Rate 60 cc's/min.
8. Remarks: Include any pertinent information such as soil's, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date June 15, 1977
Subject Sample Analyses

We are sending via the company shuttle four charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO-THM-File(2)

SAL 000009130

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC - B2 - C Lot No. of Tube 106
3. Sampling Date 6-14-77 Time Started 7⁴⁵AM Time Ended 2⁰⁰PM
Elapsed Time 372 MINUTES
4. Atm. Press. 767.6 mmHg, Temp. 23.3 °C.
5. Area the Sample Represents RESEARCH OCTANE MOTOR
JOE DIAZ
6. Name of Person Who Took the Sample J.J. MANGELINX
7. Pump Calibration Data: Atmos. Press. 767.6 mmHg, Temp. 24.4 °C
Pump Flow Rate 55 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009131

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC - 02 - 7 Lot No. of Tube 106
3. Sampling Date 6-14-77 Time Started 7⁵⁹ AM Time Ended 1:59 PM
Elapsed Time 360 MINUTES
4. Atm. Press. 767.6 mmHg, Temp. 24.4 °C.
5. Area the Sample Represents GRAVITY TABLE
RAFAEL LAVAN
6. Name of Person Who Took the Sample J.J. MANGELINKY
7. Pump Calibration Data: Atmos. Press. 767.6 mmHg, Temp. 24.4 °C
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009132

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82-8 Lot No. of Tube 106
3. Sampling Date 6-14-77 Time Started 8¹²AM Time Ended 4¹³PM
Elapsed Time 505 MINUTES
4. Atm. Press. 767.6 mmHg, Temp. 24.4 °C.
5. Area the Sample Represents GAS CHROMATOGRAPHY LAB
WILLIAM MOODY
6. Name of Person Who Took the Sample J. J. MANGELINK
7. Pump Calibration Data: Atmos. Press. 767.6 mmHg, Temp. 24.4 °C
Pump Flow Rate 46 cc's/min.
8. Remarks: Include any pertinent information such as soot's, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009133

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82-9 Lot No. of Tube 106
3. Sampling Date 6-14-77 Time Started 3:35 PM Time Ended 4:15 PM
Elapsed Time 40 MINUTES
4. Atm. Press. 768.2 mmHg, Temp. 25.0 °C.
5. Area the Sample Represents CHEMIST WORK AREA
QUINCY HIDEA, WATER TESTING
6. Name of Person Who Took the Sample J.J. MANGELINKX
7. Pump Calibration Data: Atmos. Press. 768.2 mmHg, Temp. 25.0 °C
Pump Flow Rate 500 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

CHEMIST USING BENZENE AS REAGENT
FOR TOTAL PHOSPHATE

9. TSL Analysis Data:

SAL 000009134

Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date June 14, 1977
Subject Sample Analyses

We are sending via the company shuttle five charcoal tubes for Benzene Content, data sheets are attached.

We request an additional supply of charcoal tubes.


J. J. Mangelinkx

1b
CC: MEO-THM-FILE(2)

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82-1 Lot No. of Tube 106
3. Sampling Date 6-13-77 Time Started 8²²AM Time Ended 8⁴⁷AM
Elapsed Time 25.0 MIN.
4. Atm. Press. 765.6 mmHg, Temp. 25.6 °C.
5. Area the Sample Represents GRAVITY TABLE,
RAFAEL LAVAN
6. Name of Person Who Took the Sample J. J. MANGELINX
7. Pump Calibration Data: Atmos. Press. 765.6 mmHg, Temp. 25.6 °C
Pump Flow Rate 620 cc's/min.
8. Remarks: Include any pertinent information such as soil's, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-BZ-2 Lot No. of Tube 106
3. Sampling Date 6-13-77 Time Started 8²⁵AM Time Ended 8⁵⁵AM
Elapsed Time 30.0 MINUTES
4. Atm. Press. 765.6 mmHg, Temp. 24.5 °C.
5. Area the Sample Represents GAS CHROMATOGRAPHY LAB,
WILLIAM MOODY
6. Name of Person Who Took the Sample J.J. MANGELINNY
7. Pump Calibration Data: Atmos. Press. 765.6 mmHg, Temp. 25.6 °C
Pump Flow Rate 670 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. TSL Analysis Data:

SAL 000009137

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-BZ-3 Lot No. of Tube 106
3. Sampling Date 6-13-77 Time Started 8⁴⁷AM Time Ended 2⁴⁸PM
Elapsed Time 361 MINUTES
4. Atm. Press. 765.6 mmHg, Temp. 25.6 °C.
5. Area the Sample Represents GRAVITY TABLE, RAFAEL
LAVAN
6. Name of Person Who Took the Sample J.J. MANGELINX
7. Pump Calibration Data: Atmos. Press. 765.6 mmHg, Temp. 25.6 °C
Pump Flow Rate 54 cc's/min.
8. Remarks: Include any pertinent information such as stills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82-4 Lot No. of Tube 106
3. Sampling Date 6-13-77 Time Started 8⁵⁴AM Time Ended 2⁴⁷PM
Elapsed Time 353 MINUTES
4. Atm. Press. 765.6 mmHg, Temp. 25.6 °C.
5. Area the Sample Represents RESEARCH OCTANE ENGINE,
JOE DIAZ
6. Name of Person Who Took the Sample J. J. MANGELINIX
7. Pump Calibration Data: Atmos. Press. 765.6 mmHg, Temp. 25.6 °C
Pump Flow Rate 83 cc's/min.
8. Remarks: Include any pertinent information such as soot's, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. TSL Analysis Data:

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82-5 Lot No. of Tube 106
3. Sampling Date 6-13-77 Time Started 9⁰⁰AM Time Ended 4⁴⁹PM
Elapsed Time 409 MINUTES
4. Atm. Press. 765.6 mmHg, Temp. 24.5 °C.
5. Area the Sample Represents GAS CHROMATOGRAPHY LAB,
WILLIAM MOODY
6. Name of Person Who Took the Sample J.J. MANGELINKX
7. Pump Calibration Data: Atmos. Press. 765.6 mmHg, Temp. 25.6 °C
Pump Flow Rate 90 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

2 hours at Coker testing for phenols

9. TSL Analysis Data:



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date July 5, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: NEO-THM-FILE(2)

SAL 000009141

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DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 32 Lot No. of Tube 106
3. Sampling Date 7/5/77 Time Started 7⁰⁰ AM Time Ended 3⁰⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 771.9 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents REFORMER, UNIT FOREMAN
6. Name of Person Who Took the Sample KEN COLE
7. Pump Calibration Data: Atmos. Press. 769.6 mmHg, Temp. 27.0 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
(Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009142

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 33 Lot No. of Tube 106
3. Sampling Date 7/5/77 Time Started 6⁴⁵ AM Time Ended 2⁴⁵ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 771.9 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents REFORMER , OPERATOR
6. Name of Person Who Took the Sample WILLIAM SCHROEDER
7. Pump Calibration Data: Atmos. Press. 769.6 mmHg, Temp. 27.0 °C.
Pump Flow Rate 52 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 34 Lot No. of Tube 106
3. Sampling Date 7/5/77 Time Started 6⁴⁵ AM Time Ended 2⁴⁵ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 771.9 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents REFORMER , TRAP MAN
6. Name of Person Who Took the Sample ROBERT MYERS
7. Pump Calibration Data: Atmos. Press. 769.6 mmHg, Temp. 27.0 °C.
Pump Flow Rate 58 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009144



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date July 1, 1977
Subject Sample Analyses

We are sending via the company shuttle seven charcoal tubes for Benzene Content, data sheets are attached.


J. J. mangelinkx

1b

CC: MEO, THM, FILE(2)

SAL 000009145

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 22 Lot No. of Tube 106
3. Sampling Date 6/30/77 Time Started 6⁴⁵ AM Time Ended 2³⁰ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 769.3 mmHg, Temp. 26.7 °C.
5. Area the Sample Represents TCC, OPERATOR
6. Name of Person Who Took the Sample WILLIAM SUTTON
7. Pump Calibration Data: Atmos. Press. 770.1 mmHg, Temp. 27.1 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption on charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 23 Lot No. of Tube 106
3. Sampling Date 6/30/77 Time Started 6⁴⁵ AM Time Ended 2³⁰ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 769.3 mmHg, Temp. 27.8 °C.
5. Area the Sample Represents TCC, 1ST CONTROLMAN
6. Name of Person Who Took the Sample TED SMELTON
7. Pump Calibration Data: Atmos. Press. 770.1 mmHg, Temp. 27.1 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption on charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009147

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 24 Lot No. of Tube 106
3. Sampling Date 4/30/77 Time Started 6⁴⁵ AM Time Ended 2³⁰ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 769.3 mmHg, Temp. 29.4 °C.
5. Area the Sample Represents TCC, 2ND CONTRULMAN
6. Name of Person Who Took the Sample WILSON PAYNE
7. Pump Calibration Data: Atmos. Press. 770.1 mmHg, Temp. 27.1 °C.
Pump Flow Rate 57 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption on charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 28 Lot No. of Tube 106
3. Sampling Date 6/29/77 Time Started 1⁵⁵PM Time Ended 2¹⁰PM
Elapsed Time 15.0 MINUTES
4. Atm. Press. 770.1 mmHg, Temp. 28.7 °C.
5. Area the Sample Represents PRODUCT FRACTIONATION UNIT,
CATCHING GASOLINE SAMPLES
6. Name of Person Who Took the Sample DANIEL GRAEF
7. Pump Calibration Data: Atmos. Press. 770.1 mmHg, Temp. 27.1 °C.
Pump Flow Rate 476 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009149

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 29 Lot No. of Tube 106
3. Sampling Date 6/29/77 Time Started 2¹² PM Time Ended 2²⁷ PM
Elapsed Time 15.0 MINUTES
4. Atm. Press. 770.1 mmHg, Temp. 28.7 °C.
5. Area the Sample Represents #2 CTU, CATCHING
GASOLINE SAMPLES
6. Name of Person Who Took the Sample KELLY LEDET
7. Pump Calibration Data: Atmos. Press. 770.1 mmHg, Temp. 27.1 °C.
Pump Flow Rate 476 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009150

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-BZ- 30 Lot No. of Tube 106
3. Sampling Date 6/30/77 Time Started 1³⁰ PM Time Ended 1⁴⁵ PM
Elapsed Time 15.0 MINUTES
4. Atm. Press. 769.3 mmHg, Temp. 29.4 °C.
5. Area the Sample Represents LABORATORY, SENIOR CHEMIST
6. Name of Person Who Took the Sample CLIFFORD MILLS
7. Pump Calibration Data: Atmos. Press. 769.3 mmHg, Temp. 29.0 °C.
Pump Flow Rate 445 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 31 Lot No. of Tube 106
3. Sampling Date 6/30/77 Time Started 11³⁰AM Time Ended 11⁴⁵AM
Elapsed Time 15.0 MINUTES
4. Atm. Press. 749.3 mmHg, Temp. 29.4 °C.
5. Area the Sample Represents LABORATORY, SECOND TESTER
DISTILLATION TABLE
6. Name of Person Who Took the Sample RUSSELL COOK
7. Pump Calibration Date: Atmos. Press. 749.3 mmHg, Temp. 27.0 °C.
Pump Flow Rate 445 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date June 29, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.

We request an additional supply of charcoal tubes.



J. J. Mangelinkx

1b
CC: MEO-THM-FILE(2)

SAL 000009153

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 25 Lot No. of Tube 106
3. Sampling Date 6/29/77 Time Started 9⁵⁵AM Time Ended 10¹⁰AM
Elapsed Time 15.0 MINUTES
4. Atm. Press. 770.1 mmHg, Temp. 27.1 °C.
5. Area the Sample Represents F-1 ENGINE, TESTING
REFORMATE
6. Name of Person Who Took the Sample WOODROW YOUNG
7. Pump Calibration Data: Atmos. Press. 770.1 mmHg, Temp. 27.1 °C.
Pump Flow Rate 476 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 26 Lot No. of Tube 106
3. Sampling Date 6/29/77 Time Started 11:00 AM Time Ended 11:15 AM
Elapsed Time 15.0 MINUTES
4. Atm. Press. 770.1 mmHg, Temp. 28.3 °C.
5. Area the Sample Represents # 1 REFORMER, CATCHING
GASOLINE SAMPLES
6. Name of Person Who Took the Sample TOM ELLIS
7. Pump Calibration Data: Atmos. Press. 770.1 mmHg, Temp. 27.1 °C.
Pump Flow Rate 476 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 27 Lot No. of Tube 106
3. Sampling Date 6/29/77 Time Started 11:15AM Time Ended 11:30AM
Elapsed Time 15.0 MINUTES
4. Atm. Press. 770.1 mmHg, Temp. 28.3 °C.
5. Area the Sample Represents #2 REFORMER, CATCHING
GASOLINE SAMPLES
6. Name of Person Who Took the Sample MARK TRENT
7. Pump Calibration Data: Atmos. Press. 770.1 mmHg, Temp. 29.1 °C.
Pump Flow Rate 470 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption on charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009156



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date June 28, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO-THM-FILE(2)

SAL 000009157

①

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82-19 Lot No. of Tube 106
3. Sampling Date 6/27/77 Time Started 6⁴⁵ AM Time Ended 2³⁵ P
Elapsed Time 7.83 HOURS
4. Atm. Press. 768 mmHg, Temp. 30 °C.
5. Area the Sample Represents TANK FARM, CRUDE AREA
6. Name of Person Who Took the Sample JOSEPH RICHARD
7. Pump Calibration Data: Atmos. Press. 771.8 mmHg, Temp. 29.2 °C.
Pump Flow Rate 60 cc's/min.
8. Remarks: Include any pertinent information such as still's, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

2)

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LANE CHARLES
2. Sample ID: LC-BZ-20 Lot No. of Tube 106
3. Sampling Date 6/27/77 Time Started 6⁴⁵ AM Time Ended 2³⁵ PM
Elapsed Time 7.83 HOURS
4. Atm. Press. 768 mmHg, Temp. 30 °C.
5. Area the Sample Represents TANK FARM, WEST TANK FARM
6. Name of Person Who Took the Sample EDWARD LEMELLE
7. Pump Calibration Data: Atmos. Press. 771.8 mmHg, Temp. 27.2 °C
Pump Flow Rate 54 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009159

3

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-B2-21 Lot No. of Tube 104
3. Sampling Date 6/27/77 Time Started 6⁴⁵ AM Time Ended 2³⁵ PM
Elapsed Time 7.83 HOURS
4. Atm. Press. 768 mmHg, Temp. 30 °C.
5. Area the Sample Represents TANK FARM, RUN DOWN AREA
6. Name of Person Who Took the Sample CLARENCE LANGLEY
7. Pump Calibration Data: Atmos. Press. 771.8 mmHg, Temp. 27.2 °C
Pump Flow Rate 54 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009160



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date June 24, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO-THM-FILE(2)

SAL 000009161

①

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82-1C Lot No. of Tube 106
3. Sampling Date 4/23/77 Time Started 6⁴⁰ AM Time Ended 2³⁵ PM
Elapsed Time 7.92 hours
4. Atm. Press. 771.3 mmHg, Temp. 30.3 °C.
5. Area the Sample Represents #1 REFORMER
6. Name of Person Who Took the Sample CARLTON JONES
7. Pump Calibration Data: Atmos. Press. 770.7 mmHg, Temp. 31.7 °C
Pump Flow Rate 46 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009162

(2)

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-02-17 Lot No. of Tube 106
3. Sampling Date 6-23-77 Time Started 6⁴⁵ AM Time Ended 2³⁰ PM
Elapsed Time 7.75 hours
4. Atm. Press. 771.3 mmHg, Temp. 30.3 °C.
5. Area the Sample Represents COKEA
6. Name of Person Who Took the Sample CHARLES PORTER
7. Pump Calibration Data: Atmos. Press. 770.7 mmHg, Temp. 31.7 °C
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009163

(3)

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: LAKE CHARLES
2. Sample ID: LC-82-18 Lot No. of Tube 106
3. Sampling Date 6-23-77 Time Started 6⁴⁰ AM Time Ended 2³⁵ PM
Elapsed Time 7.92 hours
4. Atm. Press. 771.3 mmHg, Temp. 30.3 °C.
5. Area the Sample Represents #2 REFORMER
6. Name of Person Who Took the Sample TOM ELLIS
7. Pump Calibration Data: Atmos. Press. 770.7 mmHg, Temp. 31.7 °C
Pump Flow Rate 62 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009164

GE
CM
QH

CONTINENTAL OIL COMPANY

PONCA CITY, OKLAHOMA

REFINING TECHNICAL SERVICES LABORATORY

Plt.: LC

File: 662.1
924

Date: 6-8-77

LABORATORY NO.: F-24-77

CHARGE: LC 49

SUBJECT: Summary of Benzene Concentration in Gasoline and Blending
Streams - Lake Charles Refinery

ANALYTICAL DATA:

Vol. % Benzene in Finished Gasoline

<u>Sample Number</u>	<u>Sample</u>	<u>Sample Date</u>	<u>Benzene, Vol. %</u>
PC 1520 LC 232-77	Unleaded	March 1977	1.5
PC 1521 LC 344-77	Regular	March 1977	1.0
PC 1522 LC 345-77	Premium	May 1977	1.1
PC 1839 LC 640-77	Regular	May 1977	1.1
PC 1840 LC 641-77	Premium	May 1977	1.0
PC 1841 LC 642-77	Unleaded	May 1977	1.1

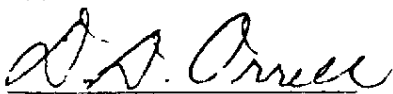
Vol. % Benzene of Refinery Streams

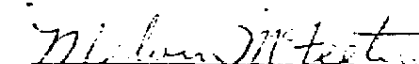
<u>Sample Number</u>	<u>Sample</u>	<u>Sample Date</u>	<u>Benzene, Vol. %</u>
PC 1842 LC 643-77	Coker Gasoline	May 1977	0.2
PC 1843 LC 644-77	Thermal Gasoline	May 1977	0.3
PC 1844 LC 645-77	TCC Gasoline	May 1977	0.5
PC 1819 LC 646-77	#1 L.S.R.	May 1977	1.8
PC 1846 LC 647-77	#2 L.S.R.	May 1977	1.6
PC 1847 LC 648-77	Denuded Casinghead	May 1977	3.7
PC 1848 LC 649-77	#1 Reformate	May 1977	0.9
PC 1849 LC 650-77	#2 Reformate	May 1977	1.0
PC 1850 LC 651-77	Primary Tower OH	May 1977	2.8

REFERENCE:

Refining Technical Services Laboratory Report E-74-77 dated 5-19-77.

Approved:


Senior Technologist


Associate Chemist

bp
cc: GAO-DRU-JRU-MEO-KCH-F

SAL 000009165

INTEROFFICE COMMUNICATION

TO: ✓ M. E. Oliver, Refining, Lake Charles
 H. C. Anderson, Refining, Billings
 B. W. Marks, Refining, Paramount
 D. A. Lindberg, Refining, Wrenshall
 M. Lider, Refining, Ponca City
 E. W. Carpenter, Refining, Denver

FROM: T. E. Courtney, Refining, Ponca City

DATE: May 27, 1977

SUBJECT: Charcoal Tubes for Ambient Air Sampling

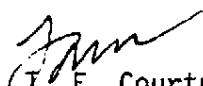
We are shipping to you on May 27, 1977, 25 each charcoal tubes and 3 clip-on-guard tubes for use in sampling air for the subsequent analysis of the benzene content. We will supply you with all the necessary charcoal tubes for the duration of this project. Inform us when your supply gets short. If you already have clip-on-guard tubes please return those we have sent.

Attached is an example data sheet which we will need for each sample. This data sheet must be complete to avoid foul ups in record keeping. Additionally it contains the necessary information for us to make analysis calculations.

Attached also are recommendations for proper sampling and charcoal tube sample transmittal. Use your own system for identifying the charcoal tube samples, however insure the same identification is used on the data sheet.

Attached also is a copy of the method we will use for the analysis. We suggest you become acquainted with this method. We realize that you may not be responsible for the sampling program at your respective refineries, however we will be looking to you for assistance in monitoring the technical aspects of the sampling program.

Your assistance with this project will be greatly appreciated.


T. E. Courtney
Senior Technologist
Technical Services Laboratory

lm

CC: GAO-RBB-DBS-JWD-IFW-RGA-KCH-F

SAL 000009166

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: _____
2. Sample ID: _____ Lot No. of Tube _____
3. Sampling Date _____ Time Started _____ Time Ended _____
Elapsed Time _____
4. Atm. Press. _____ mmHg, Temp. _____ °C.
5. Area the Sample Represents _____

6. Name of Person Who Took the Sample _____
7. Pump Calibration Data: Atmos. Press. _____ mmHg, Temp. _____ °C
Pump Flow Rate _____ cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. TSL Analysis Data:

SAL 000009167



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date September 19, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009053

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 82 Lot No. of Tube 106
3. Sampling Date 9/15/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 746.0 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents PROCESS ENGINEER,
REFORMER AND POWER PLANT
6. Name of Person Who Took the Sample STEVE D. GRIMES
7. Pump Calibration Data: Atmos. Press. 745.8 mmHg, Temp. 23.3 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009054

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 83 Lot No. of Tube 106
3. Sampling Date 9/15/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 766.0 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents PROCESS ENGINEER,
TCL, #2 CTU, CAT POLY
6. Name of Person Who Took the Sample RICK B. WOODNIK
7. Pump Calibration Data: Atmos. Press. 765.8 mmHg, Temp. 23.3 °C.
Pump Flow Rate 44 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 84 Lot No. of Tube 106
3. Sampling Date 9/15/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 746.0 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents ENVIRONMENTAL ENGINEER
6. Name of Person Who Took the Sample A. J. NASH
7. Pump Calibration Data: Atmos. Press. 745.8 mmHg, Temp. 23.3 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009056



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date September 13, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.

We request an additional supply of charcoal tubes.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009057

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-82- 79 Lot No. of Tube 106
3. Sampling Date 9/12/77 Time Started 7⁵⁰ AM Time Ended 3¹⁰ PM
Elapsed Time 7.5 HOURS
4. Atm. Press. 744.5 mmHg, Temp. 32.2 °C.
5. Area the Sample Represents
SHIFT FOREMAN
6. Name of Person Who Took the Sample WADE DUPREE
7. Pump Calibration Data: Atmos. Press. 767.1 mmHg, Temp. 25.4 °C.
Pump Flow Rate 53 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-8Z- 80 Lot No. of Tube 106
3. Sampling Date 9/12/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
 Elapsed Time 8.0 HOURS
4. Atm. Press. 766.5 mmHg, Temp. 32.2 °C.
5. Area the Sample Represents INSPECTION DEPT.
6. Name of Person Who Took the Sample JIM WALKER
7. Pump Calibration Data: Atmos. Press. 767.1 mmHg, Temp. 25.4 °C.
 Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
 Absorption or charcoal
 Desorption with carbon disulfide
 Gas chromatograph
11. TSL Analysis Data:
 PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-82- 81 Lot No. of Tube 106
3. Sampling Date 9/12/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 746.5 mmHg, Temp. 32.2 °C.
5. Area the Sample Represents INSPECTION DEPT.
6. Name of Person Who Took the Sample DAVID CHAMBERLAIN
7. Pump Calibration Data: Atmos. Press. 747.1 mmHg, Temp. 25.6 °C.
Pump Flow Rate 44 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date September 9, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009061

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
 2. Sample ID: LC-82- 76 Lot No. of Tube 106
 3. Sampling Date 9/8/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
 Elapsed Time 8.0 HOURS
 4. Atm. Press. 766.4 mmHg, Temp. 26.7 °C.
 5. Area the Sample Represents GUARD
-
6. Name of Person Who Took the Sample ALVIN GUIARDOZ
 7. Pump Calibration Data: Atmos. Press. 767.8 mmHg, Temp. 26.1 °C.
 Pump Flow Rate 50 cc's/min.
 8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
-
9. Sample Procedure: Personal Sampling pump worn in job performance
 10. Sampling and analytical method:
 Absorption or charcoal
 Desorption with carbon disulfide
 Gas chromatograph
 11. TSL Analysis Data:
 PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BE-77 Lot No. of Tube 106
3. Sampling Date 9/8/77 Time Started 8⁰⁰AM Time Ended 4⁰⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 746.4 mmHg, Temp. 30.6 °C.
5. Area the Sample Represents FIRE MARSHAL
6. Name of Person Who Took the Sample BILL WILSON
7. Pump Calibration Data: Atmos. Press. 767.8 mmHg, Temp. 24.1 °C.
Pump Flow Rate 44 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-8Z-78 Lot No. of Tube 106
3. Sampling Date 9/8/77 Time Started 8⁰⁰ AM Time Ended 4⁰⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 744.4 mmHg, Temp. 26.7 °C.
5. Area the Sample Represents PLANT NURSE
6. Name of Person Who Took the Sample JO TODD
7. Pump Calibration Data: Atmos. Press. 747.8 mmHg, Temp. 26.1 °C.
Pump Flow Rate 53 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009064



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date September 7, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009065

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-82- 75 Lot No. of Tube 106
3. Sampling Date 9/6/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 762.5 mmHg, Temp. 33.3 °C.
5. Area the Sample Represents TRANSPORTATION,
LIGHT TRUCK + TRACTOR OPERATOR
6. Name of Person Who Took the Sample GURVIS HARVEY
7. Pump Calibration Data: Atmos. Press. 760.2 mmHg, Temp. 26.7 °C.
Pump Flow Rate 56 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
1. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 74 Lot No. of Tube 106
3. Sampling Date 9/6/77 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 742.5 mmHg, Temp. 33.3 °C.
5. Area the Sample Represents TRANSPORTATION,
HEAVY TRUCK + TRACTOR OPERATOR
6. Name of Person Who Took the Sample MARK STEVENS
7. Pump Calibration Data: Atmos. Press. 760.2 mmHg, Temp. 26.7 °C.
Pump Flow Rate 49 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-92- 73 Lot No. of Tube 104
3. Sampling Date 9/4/77 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 762.5 mmHg, Temp. 33.3 °C.
5. Area the Sample Represents TRANSPORTATION,
HEAVY EQUIPMENT OPERATOR
6. Name of Person Who Took the Sample JIM SPRAY BERRY
7. Pump Calibration Data: Atmos. Press. 760.3 mmHg, Temp. 26.7 °C.
Pump Flow Rate 52 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date September 2, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-8Z- 70 Lot No. of Tube 106
3. Sampling Date 9/1/77 Time Started 7³⁰AM Time Ended 3³⁰PM
 Elapsed Time 8.0 HOURS
4. Atm. Press. 768.8 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents UTILITY HELPER
6. Name of Person Who Took the Sample RONALD CARRAHAN
7. Pump Calibration Data: Atmos. Press. 766.4 mmHg, Temp. 26.7 °C.
 Pump Flow Rate 53 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
 Absorption or charcoal
 Desorption with carbon disulfide
 Gas chromatograph
11. TSL Analysis Data:
 PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
 2. Sample ID: LC-8Z- 71 Lot No. of Tube 106
 3. Sampling Date 9/1/77 Time Started 7³⁰AM Time Ended 3³⁰ PM
 Elapsed Time 8.0 HOURS
 4. Atm. Press. 768.8 mmHg, Temp. 28.9 °C.
 5. Area the Sample Represents JANITOR
-
6. Name of Person Who Took the Sample VALERY MONTGOMERY
 7. Pump Calibration Data: Atmos. Press. 766.4 mmHg, Temp. 26.7 °C.
 Pump Flow Rate 57 cc's/min.
 8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
-
9. Sample Procedure: Personal Sampling pump worn in job performance
 10. Sampling and analytical method:
 Absorption or charcoal
 Desorption with carbon disulfide
 Gas chromatograph
 11. TSL Analysis Data:
 PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 72 Lot No. of Tube
3. Sampling Date 9/1/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 748.8 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents TOOL REPAIRMAN
6. Name of Person Who Took the Sample A. H. JOHNSTON
7. Pump Calibration Data: Atmos. Press. 746.4 mmHg, Temp. 26.7 °C.
Pump Flow Rate 58 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date August 31, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b

CC: MEO, THM, FILE(2)

SAL 000009073

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 67 Lot No. of Tube 106
3. Sampling Date 8/30/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 766 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents WELDER FOREMAN
6. Name of Person Who Took the Sample HANK GLOVER
7. Pump Calibration Data: Atmos. Press. 770.5 mmHg, Temp. 24.7 °C.
Pump Flow Rate 54 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009074

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 68 Lot No. of Tube 106
3. Sampling Date 8/30/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 746 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents WELDER, 1ST
6. Name of Person Who Took the Sample CARROLL MIRE
7. Pump Calibration Data: Atmos. Press. 770.5 mmHg, Temp. 24.7 °C.
Pump Flow Rate 55 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009075

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-3Z- 69 Lot No. of Tube 106
3. Sampling Date 8/30/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 Hours
4. Atm. Press. 746 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents WELDER, 1ST
6. Name of Person Who Took the Sample JACKIE LABAUVE
7. Pump Calibration Data: Atmos. Press. 770.5 mmHg, Temp. 26.7 °C.
Pump Flow Rate 54 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date August 26, 1977
Subject Sample Analyses

We are sending via the company shuttle two charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009077

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 66 Lot No. of Tube 7106
3. Sampling Date 8/26/77 Time Started 7³⁰ AM Time Ended 9³⁰ AM
Elapsed Time 2.0 HOURS
4. Atm. Press. 766.8 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents OUTSIDE MACHINIST
6. Name of Person Who Took the Sample CHARLES KILPATRICK
7. Pump Calibration Data: Atmos. Press. 763.0 mmHg, Temp. 26.1 °C.
Pump Flow Rate 54 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

**BATTERIES WENT DEAD, BATTERY
PACK REPLACED**

9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-BZ- 65 Lot No. of Tube 106
3. Sampling Date 8/26/77 Time Started 7³⁰ AM Time Ended 3¹⁰ PM
Elapsed Time 7.7 HOURS
4. Atm. Press. 744.9 mmHg, Temp. 27.8 °C.
5. Area the Sample Represents OUTSIDE MACHINIST
6. Name of Person Who Took the Sample TOM CAIN
7. Pump Calibration Data: Atmos. Press. 743.0 mmHg, Temp. 26.1 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date August 23, 1977
Subject Sample Analyses

We are sending via the company shuttle two charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009080

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-92- 43 Lot No. of Tube 106
3. Sampling Date 8/22/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 Hours
4. Atm. Press. 768.6 mmHg, Temp. 30.6 °C.
5. Area the Sample Represents PIPE FITTER, 1ST
6. Name of Person Who Took the Sample CHARLES COURTNEY
7. Pump Calibration Data: Atmos. Press. 767.2 mmHg, Temp. 26.4 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-8Z- 64 Lot No. of Tube 106
3. Sampling Date 8/22/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 Hours
4. Atm. Press. 768.6 mmHg, Temp. 29.4 °C.
5. Area the Sample Represents PIPEFITTER FOREMAN
6. Name of Person Who Took the Sample WILLIS DUHON
7. Pump Calibration Data: Atmos. Press. 767.2 mmHg, Temp. 26.4 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date August 19, 1977
Subject Sample Analyses

We are sending via the company shuttle two charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009083

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-62- 21 Lot No. of Tube 106
3. Sampling Date 8/19/77 Time Started 7⁰⁰ AM Time Ended 3⁰⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 749.2 mmHg, Temp. 24.7 °C.
5. Area the Sample Represents INSIDE MACHINIST
6. Name of Person Who Took the Sample JOHN SANDERS
7. Pump Calibration Data: Atmos. Press. 748.0 mmHg, Temp. 25.6 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009084

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 62 - Lot No. of Tube 106
3. Sampling Date 8/19/77 Time Started 7⁰⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.5 HOURS
4. Atm. Press. 769.2 mmHg, Temp. 31.1 °C.
5. Area the Sample Represents PAINTER - INSULATOR, 1ST
6. Name of Person Who Took the Sample HAROLD COPLIN
7. Pump Calibration Data: Atmos. Press. 768.0 mmHg, Temp. 25.6 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

SAL 000009085



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date August 16, 1977
Subject Sample Analyses

We are sending via the company shuttle two charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 59 Lot No. of Tube 106
3. Sampling Date 8/16/77 Time Started 7⁰⁰ AM Time Ended 3¹⁵ PM
Elapsed Time 8.2 HOURS
4. Atm. Press. 771.1 mmHg, Temp. 28.3 °C.
5. Area the Sample Represents FOREMAN , INSTRUMENT
GROUP
6. Name of Person Who Took the Sample L.H. SHAFFNER
7. Pump Calibration Data: Atmos. Press. 770.1 mmHg, Temp. 27.2 °C.
Pump Flow Rate 59 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BE- 60 Lot No. of Tube - 106
3. Sampling Date 8/16/77 Time Started 7⁰⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.5 HOURS
4. Atm. Press. 770.1 mmHg, Temp. 29.4 °C.
5. Area the Sample Represents INSTRUMENTMAN , 1ST
ALVA C. DAY ↓
6. Name of Person Who Took the Sample _____
7. Pump Calibration Data: Atmos. Press. 770.1 mmHg, Temp. 27.2 °C.
Pump Flow Rate 40 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date August 5, 1977
Subject Sample Analyses

We are sending via the company shuttle two charcoal tubes for Benzene Content, data sheets are attached.

We request an additional supply of charcoal tubes.


J. J. Mangelinkx

1b

CC: MEO, THM, FILE(2)

SAL 000009089

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 57 Lot No. of Tube 106
3. Sampling Date 8/5/77 Time Started 7³⁰ AM Time Ended 3⁴⁵ PM
Elapsed Time 8.2 HOURS
4. Atm. Press. 770.7 mmHg, Temp. 30.0 °C.
5. Area the Sample Represents ELECTRICIAN, FOREMAN
LYNN SAVOY
6. Name of Person Who Took the Sample _____
7. Pump Calibration Data: Atmos. Press. 748.6 mmHg, Temp. 25.6 °C.
Pump Flow Rate 53 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 58 Lot No. of Tube 106
3. Sampling Date 8/5/77 Time Started 7³⁰ AM Time Ended 3⁴⁵ PM
• Elapsed Time 8.2 HOURS
4. Atm. Press. 770.7 mmHg, Temp. 32.8 °C.
5. Area the Sample Represents ELECTRICIAN, 1ST
EVANS GILLARD
6. Name of Person Who Took the Sample _____
7. Pump Calibration Data: Atmos. Press. 768.6 mmHg, Temp. 25.6 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date August 1, 1977
Subject Sample Analyses

We are sending via the company shuttle two charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009092

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 56 Lot No. of Tube 106
3. Sampling Date 8/1/77 Time Started 7⁰⁰AM Time Ended 3³⁰PM
Elapsed Time 8.5 HOURS
4. Atm. Press. 773.2 mmHg, Temp. 33.3 °C.
5. Area the Sample Represents CARPENTER, 1ST
6. Name of Person Who Took the Sample JAMES PERRY
7. Pump Calibration Data: Atmos. Press. 772.1 mmHg, Temp. 26.7 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-8Z- 55 Lot No. of Tube 106
3. Sampling Date 8/1/77 Time Started 7⁰⁰AM Time Ended 3³⁰PM
Elapsed Time 8.5 HOURS
4. Atm. Press. 773.2 mmHg, Temp. 32.2 °C.
5. Area the Sample Represents CARPENTER, FOREMAN
6. Name of Person Who Took the Sample ELTON LEBERT
7. Pump Calibration Data: Atmos. Press. 772.1 mmHg, Temp. 26.7 °C.
Pump Flow Rate 55 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date July 29, 1977
Subject Sample Analyses

We are sending via the company shuttle two charcoal tubes for Benzene Content, data sheets are attached.

We request an additional supply of charcoal tubes.


J. J. Mangelinkx

1b

CC: MEO, THM, FILE(2)

SAL 000009095

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 53 Lot No. of Tube 104
3. Sampling Date 7/28/77 Time Started 6⁴⁵ AM Time Ended 2³⁰ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 768.8 mmHg, Temp. 27.6 °C.
5. Area the Sample Represents COKE, CALKINER
FOREMAN
6. Name of Person Who Took the Sample EARL ROBINSON
7. Pump Calibration Data: Atmos. Press. 773.6 mmHg, Temp. 26.1 °C.
Pump Flow Rate 58 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

②

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 54 Lot No. of Tube 106
3. Sampling Date 7/28/77 Time Started 6⁴⁵ AM Time Ended 11⁰⁰ AM
Elapsed Time 4.3 HOURS
4. Atm. Press. 768.8 mmHg, Temp. 32.2 °C.
5. Area the Sample Represents COKER - CALCINER -
CALCINER OUTSIDE MAN
6. Name of Person Who Took the Sample RAMSEY DUHON
7. Pump Calibration Data: Atmos. Press. 773.6 mmHg, Temp. 26.1 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

BATTERIES WENT DEAD AFTER
4.3 HOURS IN SERVICE
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

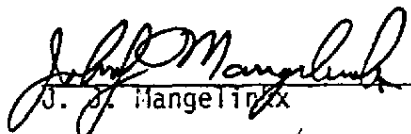
SAL 000009097



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date July 25, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO-THH-FILE(2)

SAL 000009098

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 51 Lot No. of Tube 106
3. Sampling Date 7/25/77 Time Started 6:45 AM Time Ended 2:45 PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 673.0 mmHg, Temp. 32.2 °C.
5. Area the Sample Represents COKER - CALCINER,
2ND CONTROL MAN
6. Name of Person Who Took the Sample RAMSEY DUHON
7. Pump Calibration Data: Atmos. Press. 771.2 mmHg, Temp. 26.3 °C.
Pump Flow Rate 49 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009099

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-8Z- 52 Lot No. of Tube 106
3. Sampling Date 7/25/77 Time Started 6⁴⁵AM Time Ended 2⁴⁵PM
Elapsed Time 8.0. HOURS
4. Atm. Press. 673.0 mmHg, Temp. 32.2 °C.
5. Area the Sample Represents COKEA - CALCINER,
EQUIPMENT OPERATOR
6. Name of Person Who Took the Sample ALLEN KENNERSON
7. Pump Calibration Data: Atmos. Press. 771.2 mmHg, Temp. 26.3 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009100

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 50 Lot No. of Tube 106
3. Sampling Date 7/25/77 Time Started 6⁴⁵AM Time Ended 2⁴⁵PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 673.0 mmHg, Temp. 31.7 °C.
5. Area the Sample Represents COKER - CALCINER,
OPERATOR
6. Name of Person Who Took the Sample LESLIE FORSYTHE
7. Pump Calibration Data: Atmos. Press. 771.2 mmHg, Temp. 26.3 °C.
Pump Flow Rate 52 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009101



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date July 21, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO-THM-FILE(2)

SAL 000009102

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 47 Lot No. of Tube 106
3. Sampling Date 7/21/77 Time Started 6⁴⁵ AM Time Ended 2³⁵ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 772.7 mmHg, Temp. 26.8 °C.
5. Area the Sample Represents LOADING DOCKS, FOREMAN
6. Name of Person Who Took the Sample E. MADDOX
7. Pump Calibration Data: Atmos. Press. 770.6 mmHg, Temp. 26.1 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009103

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 48 Lot No. of Tube 106
3. Sampling Date 7/21/77 Time Started 6 45 AM Time Ended 2 35 PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 772.7 mmHg, Temp. 30.0 °C.
5. Area the Sample Represents LOADING DOCKS, OPERATOR
6. Name of Person Who Took the Sample WILLIAM DARRHIN
7. Pump Calibration Data: Atmos. Press. 770.6 mmHg, Temp. 26.1 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009104

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 49 Lot No. of Tube 106
3. Sampling Date 7/21/77 Time Started 6⁴⁵ AM Time Ended 2³⁵ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 772.7 mmHg, Temp. 30.0 °C.
5. Area the Sample Represents LOADING DOCKS, 1ST LOADER
6. Name of Person Who Took the Sample ANDREW JOHNSON
7. Pump Calibration Date: Atmos. Press. 770.6 mmHg, Temp. 26.1 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009105



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date July 18, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.

We request an additional supply of charcoal tubes.


J. J. Mangelinkx

1b
CC: MEO-THM-FILE(2)

SAL 000009106

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 44 Lot No. of Tube 106
3. Sampling Date 7/18/77 Time Started 6⁴⁵AM Time Ended 2⁴⁵PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 770.3 mmHg, Temp. 26.7 °C.
5. Area the Sample Represents PRODUCT FRACTIONATION,
FOREMAN
6. Name of Person Who Took the Sample BILL LYONS
7. Pump Calibration Date: Atmos. Press. 772.6 mmHg, Temp. 27.8 °C.
Pump Flow Rate 49 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009107

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 46 Lot No. of Tube 106
3. Sampling Date 7/16/77 Time Started 6⁴⁵ AM Time Ended 2⁴⁵ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 770.3 mmHg, Temp. 29.4 °C.
5. Area the Sample Represents PRODUCT FRACTIONATION,
1ST CONTROL MAN
6. Name of Person Who Took the Sample WILLARD SLATE
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 27.8 °C.
Pump Flow Rate 53 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009108

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-BZ- 45 Lot No. of Tube 100
3. Sampling Date 7/18/77 Time Started 6⁴⁵ AM Time Ended 2⁴⁵ PM
Elapsed Time 8.0 Hours
4. Atm. Press. 770.3 mmHg, Temp. 26.7 °C.
5. Area the Sample Represents PRODUCT FRACTIONATION,
OPERATOR
6. Name of Person Who Took the Sample HENRY ORSOT
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 27.8 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009109

⑥ 186687

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-3Z- 121 Lot No. of Tube 107
3. Sampling Date 3/15/78 Time Started 7³⁰ AM Time Ended 3⁰⁰ PM
Elapsed Time 7.5 HOURS
4. Atm. Press. 764 mmHg, Temp. 22.2 °C.
5. Area the Sample Represents GRAVITY TABLE,
2ND TESTER
6. Name of Person Who Took the Sample BERNARD BOURGEOIS
7. Pump Calibration Data: Atmos. Press. 763 mmHg, Temp. 20.0 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009017



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date March 14, 1978
Subject Sample Analyses

We are sending via the company shuttle five charcoal tubes for Benzene Content, data sheets are attached. These samples were taken to gather Laboratory Air Circulation Data.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

①

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-BZ- 112 Lot No. of Tube 107
3. Sampling Date 3/14/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 744 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents VAPOR PRESSURE BATH
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Date: Atmos. Press. 741 mmHg, Temp. 20.0 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

2

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 113 Lot No. of Tube 107
3. Sampling Date 3/14/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 764 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents EPA TABLE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 761 mmHg, Temp. 20.0 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

(4)

140706

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 114 Lot No. of Tube 107
3. Sampling Date 3/14/78 Time Started 7³⁰ AM Time Ended 3²⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 764 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents 1ST TESTERS BALANCE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 761 mmHg, Temp. 20.0 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

⑤

649326

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-8Z- 115 Lot No. of Tube 107
3. Sampling Date 3/14/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 744 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents CHEMIST'S SOUTHEAST
LAB TABLE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 761 mmHg, Temp. 20.0 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

SAL 000009022

⑥ 149094

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 116 Lot No. of Tube 107
3. Sampling Date 3/14/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 744 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents KNOCK ROOM, COO TABLE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Date: Atmos. Press. 761 mmHg, Temp. 20.0 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date March 10, 1978
Subject Sample Analyses

We are sending via the company shuttle five charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: NEO, THM, FILE(2)

SAL 000009024

59708

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 107 Lot No. of Tube 107
3. Sampling Date 3/9/78 Time Started 7⁰⁰AM Time Ended 2⁴⁵PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 768 mmHg, Temp. 23.0 °C.
5. Area the Sample Represents LABORATORY, 2ND TESTER
GRAVITY TABLE
6. Name of Person Who Took the Sample PAUL OAKMAN
7. Pump Calibration Data: Atmos. Press. 769 mmHg, Temp. 21.1 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. Sample Procedure: Personal Sampling pump worn in job performance

10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM

SAL 000009025

05400

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 108 Lot No. of Tube 107
3. Sampling Date 3/9/78 Time Started 7⁰⁰ AM Time Ended 2⁴⁵ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 768 mmHg, Temp. 23.0 °C.
5. Area the Sample Represents LABORATORY, 2ND TESTER

DISTILLATION TABLE

6. Name of Person Who Took the Sample HENRY COLEMAN
7. Pump Calibration Data: Atmos. Press. 769 mmHg, Temp. 21.1 °C.
Pump Flow Rate 54 cc's/min.

8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. Sample Procedure: Personal Sampling pump worn in job performance

10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-3Z- 109 Lot No. of Tube 107
3. Sampling Date 3/9/78 Time Started 7⁰⁰ AM Time Ended 2⁴⁵ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 768 mmHg, Temp. 23.0 °C.
5. Area the Sample Represents LABORATORY, 1ST TESTER
6. Name of Person Who Took the Sample ARTHUR GUILLORY
7. Pump Calibration Data: Atmos. Press. 769 mmHg, Temp. 21.1 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009027

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-32- 110 Lot No. of Tube 107
3. Sampling Date 3/9/78 Time Started 7⁰⁰AM Time Ended 2⁴⁵PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 748 mmHg, Temp. 23.0 °C.
5. Area the Sample Represents LABORATORY, SPECIAL
TESTER, OCTANE ANALYST
6. Name of Person Who Took the Sample ALLEN BOUDREAU
7. Pump Calibration Data: Atmos. Press. 769 mmHg, Temp. 21.1 °C.
Pump Flow Rate 49 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009028

6) 99275

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-BZ- 111 Lot No. of Tube 107
3. Sampling Date 3/9/78 Time Started 7³⁰AM Time Ended 3³⁰AM
Elapsed Time 8.0 HOURS
4. Atm. Press. 768 mmHg, Temp. 23.0 °C.
5. Area the Sample Represents GAS CHROMATOGRAPHY
CHEMIST
6. Name of Person Who Took the Sample GARY EAGAN
7. Pump Calibration Date: Atmos. Press. 769 mmHg, Temp. 21.1 °C.
Pump Flow Rate 50 cc's/min
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009029



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date November 14, 1977
Subject Sample Analyses

We are sending via the company shuttle one charcoal tube for Benzene Content, a data sheet is attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009030

DATA SHEET

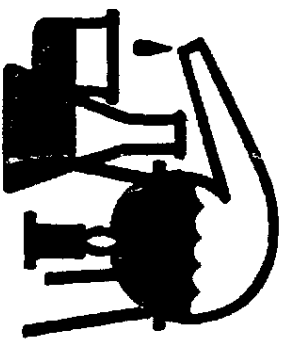
AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BE- 100 Lot No. of Tube 107
3. Sampling Date 11/14/77 Time Started 9⁵⁷ AM Time Ended 10¹³ PM
Elapsed Time 15 ~~HOURS~~ MINUTES
4. Atm. Press. 774.5 mmHg, Temp. 15.6 °C.
5. Area the Sample Represents FILLING LABORATORY
TRUCK WITH GASOLINE
6. Name of Person Who Took the Sample R. LAVAN
7. Pump Calibration Date: Atmos. Press. 748.8 mmHg, Temp. 24.4 °C.
Pump Flow Rate 492 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

GUIDELINES FOR REDUCING EXPOSURE

TO BENZENE

IN OSHA'S NEW EMERGENCY



Regardless of the outcome of the current morass of litigation surrounding OSHA's emergency temporary standard on benzene, there are certain fundamental facts and procedures with which everyone working at a job that entails potential exposure to benzene emissions should be familiar.

The guidelines presented herein are adapted from material which accompanied the Labor Department's announcement of the benzene emergency temporary standard. This information is, however, merely advisory in nature. It has no legal effect and does not seek to impose any additional requirements for employers. Adherence to these guidelines by employers and employees both, however, should contribute to making a more healthful workplace.

Anyone interested in obtaining free copies of the benzene emergency temporary standard or the recently published proposal for a permanent standard on benzene should contact OSHA's Office of Administrative Service, Rm. N-3423, U.S. Department of Labor, 200 Constitution Ave., N.W., Washington, D.C. 20210.

GENERAL INFORMATION

- Impervious protective clothing (such as boots, gloves, sleeves, aprons, etc.) should be worn over any parts of the body that could be exposed repeatedly to benzene.
- A face shield should be worn if the employer's face or eyes could be splashed with liquid benzene.
- Benzene splashed into an employee's eyes should be washed out immediately with large amounts of water. A doctor should be called as soon as possible.
- If benzene is spilled on clothing or skin, the contaminated clothing should be removed as soon as possible, and the exposed skin should be washed immediately with large amounts of water and soap.
- An employee experiencing difficulty in breathing should tell the employer.
- An employee who has inhaled large amounts of benzene should be exposed to fresh air at once.

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posed to fresh air at once. Artificial respiration should be applied only if breathing has stopped. A doctor should be called as soon as possible.

- If an employee swallows benzene, vomiting should not be induced. A doctor should be called immediately.
- Any employee is entitled to observe the benzene monitoring procedure. The employee also is entitled to receive an explanation of the measurement procedure, to observe the steps taken in the measurement procedure, and to record the results obtained. When the monitoring takes place in an area where respirators or protective clothing or equipment are required, the employee must wear the clothing and equipment.
- The employer or authorized employee representative is entitled to see records of benzene exposure measurements upon request. The employer can request that his or her personal physician be furnished with the medical examination records.
- Benzene liquid is highly flammable. It should be stored in tightly closed containers in a cool, well-ventilated area. All sources of ignition should be controlled. Nonsparking tools should be used when opening or closing benzene containers. Metal benzene containers should be grounded or bonded.
- Fire extinguishers, where provided, must be readily available, and the employee should know where they are located and how to operate them. Smoking is prohibited in areas where benzene is used or stored. The employee should ask his or her supervisor where benzene is used in the work area and for any additional plant safety rules.

GUIDELINES FOR EMERGENCIES

- Benzene leaks or spills should be flushed with large quantities of water. Do not flush benzene into a confined space, such as a sewer, because of the danger of explosion. Remove all ignition sources, and ventilate enclosed places.
- Benzene disposal must be accomplished in conformance with local ordinances and regulations. If allowed, benzene should be absorbed in dry sand or earth and deposited in a sanitary landfill. Benzene in small quantities may be disposed of by removing it a safe distance from combustibles, pouring it in dry sand or earth, and igniting it cautiously. Large amounts of benzene may be atomized in a suitable combustion chamber.
- High exposures to benzene can occur when transferring the liquid from one container to another. Such operations should be well ventilated, and good work practices should be established to avoid spills.
- Benzene containers should be grounded and bonded effectively prior to opening and pouring, and sources of ignition should be eliminated.
- Employers should take a medical history and provide laboratory tests for any employee exposed to benzene. The tests should be provided without cost to the employee.
- Employers should advise employees in all plant areas and operations where exposure to benzene could occur. A few of the common operations in which benzene exposures may occur are: manufacture of styrene, phenol, cyclohexane, pesticides, and detergents. ■

75001

REF C 4118

[illegible]



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date October 3, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 97 Lot No. of Tube 107
3. Sampling Date 10/3/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 760.2 mmHg, Temp. 24.0 °C.
5. Area the Sample Represents SECRETARY , LABORATORY
6. Name of Person Who Took the Sample LESTER BIDDLE
7. Pump Calibration Data: Atmos. Press. 764.6 mmHg, Temp. 25.6 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 98 Lot No. of Tube 107
3. Sampling Date 10/3/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 740.2 mmHg, Temp. 23.3 °C.
5. Area the Sample Represents CONTRACT, CONSTRUCTION
FOREMAN
6. Name of Person Who Took the Sample WALLACE BAKER
7. Pump Calibration Data: Atmos. Press. 764.6 mmHg, Temp. 25.6 °C.
Pump Flow Rate 46 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-8Z- 99 Lot No. of Tube 107
3. Sampling Date 10/3/77 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 760.2 mmHg, Temp. 24.0 °C.
5. Area the Sample Represents MECHANICAL ENGINEER
6. Name of Person Who Took the Sample A. R. GUERRINI
7. Pump Calibration Data: Atmos. Press. 764.6 mmHg, Temp. 25.4 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date September 30, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009038

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-82- 94 Lot No. of Tube 107
3. Sampling Date 9/30/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 768.9 mmHg, Temp. 30.6 °C.
5. Area the Sample Represents TRAINING SUPERVISOR
6. Name of Person Who Took the Sample JACK SUTTLE
7. Pump Calibration Data: Atmos. Press. 764.6 mmHg, Temp. 26.1 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-EE- 95 Lot No. of Tube 107
3. Sampling Date 9/30/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 708.9 mmHg, Temp. 30.6 °C.
5. Area the Sample Represents SENIOR ANALYST
6. Name of Person Who Took the Sample F.O. RODRIQUE
7. Pump Calibration Data: Atmos. Press. 764.6 mmHg, Temp. 26.1 °C.
Pump Flow Rate 44 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

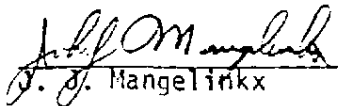
1. Plant: Lake Charles Refinery
2. Sample ID: LC-83- 96 Lot No. of Tube 107
3. Sampling Date 9/30/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 748.9 mmHg, Temp. 30.6 °C.
5. Area the Sample Represents PLANNER
6. Name of Person Who Took the Sample BILL COUCH
7. Pump Calibration Data: Atmos. Press. 744.6 mmHg, Temp. 24.1 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date September 23, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009042

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-82- 91 Lot No. of Tube 106
3. Sampling Date 9/23/77 Time Started 7¹⁵ AM Time Ended 3¹⁵ PM
Elapsed Time 8-0 HOURS
4. Atm. Press. 764.8 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents FIRE MARSHAL
6. Name of Person Who Took the Sample ESEL HORTON
7. Pump Calibration Data: Atmos. Press. 769.0 mmHg, Temp. 25.4 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 92 Lot No. of Tube 106
3. Sampling Date 9/23/77 Time Started 7¹⁵ AM Time Ended 3¹⁵ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 766.8 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents SAFETY SUPERVISOR
6. Name of Person Who Took the Sample JOHN LEMAIRE
7. Pump Calibration Data: Atmos. Press. 769.0 mmHg, Temp. 25.6 °C.
Pump Flow Rate 44 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-33- 93 Lot No. of Tube 106
3. Sampling Date 9/23/77 Time Started 7¹⁵ AM Time Ended 3¹⁵ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 746.8 mmHg, Temp. 28.9 °C.
5. Area the Sample Represents ZONE FOREMAN
6. Name of Person Who Took the Sample CLARENCE LEBERT
7. Pump Calibration Data: Atmos. Press. 769.0 mmHg, Temp. 25.4 °C.
Pump Flow Rate 52 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM



Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date September 22, 1977
Subject Sample Analyses

We are sending via the company shuttle three charcoal tubes for Benzene Content, data sheets are attached.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-32- 88 Lot No. of Tube 106
3. Sampling Date 9 / 21 / 77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 746.8 mmHg, Temp. 28.3 °C.
5. Area the Sample Represents PLANNER
6. Name of Person Who Took the Sample J.B. JOHNSON
7. Pump Calibration Data: Atmos. Press. 745.4 mmHg, Temp. 23.9 °C.
Pump Flow Rate 56 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-82- 89 Lot No. of Tube 106
3. Sampling Date 9/21/77 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 766.9 mmHg, Temp. 28.3 °C.
5. Area the Sample Represents PLANNER
6. Name of Person Who Took the Sample NORMAN BELL
7. Pump Calibration Data: Atmos. Press. 765.4 mmHg, Temp. 23.9 °C.
Pump Flow Rate 44 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 90 Lot No. of Tube 106
3. Sampling Date 9/21/77 Time Started 7¹⁵ AM Time Ended 3³⁰ PM
Elapsed Time 8.2 HOURS
4. Atm. Press. 766.8 mmHg, Temp. 28.3 °C.
5. Area the Sample Represents CONSTRUCTION FOREMAN
6. Name of Person Who Took the Sample WALLACE BAKER
7. Pump Calibration Data: Atmos. Press. 765.4 mmHg, Temp. 23.9 °C.
Pump Flow Rate 53 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

*Filled tank with gasoline
entered crude oil th.*
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-82- 85 Lot No. of Tube 106
3. Sampling Date 9/19/77 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 767 mmHg, Temp. 26.1 °C.
5. Area the Sample Represents LABORATORY, ASS'T
CHIEF CHEMIST
6. Name of Person Who Took the Sample J.J. MANGELINKX
7. Pump Calibration Data: Atmos. Press. 767 mmHg, Temp. 26.1 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009050

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 86 Lot No. of Tube 106
3. Sampling Date 9/19/77 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 767 mmHg, Temp. 26.1 °C.
5. Area the Sample Represents LABORATORY, SENIOR CHEMIST
6. Name of Person Who Took the Sample CLIFFORD MILLS
7. Pump Calibration Data: Atmos. Press. 767 mmHg, Temp. 26.1 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-82- 87 Lot No. of Tube 106
3. Sampling Date 9/19/77 Time Started 7³⁰AM Time Ended 3⁰⁰PM
Elapsed Time 7.5 HOURS
4. Atm. Press. 767 mmHg, Temp. 26.1 °C.
5. Area the Sample Represents LABORATORY, FIRST
TESTER
6. Name of Person Who Took the Sample HARRY JOUETT
7. Pump Calibration Data: Atmos. Press. 767 mmHg, Temp. 26.1 °C.
Pump Flow Rate 44 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

A similar procedure is followed for the backup sections.

(c) Read the desorption efficiency from the appropriate methane curve for the amounts found in either the front or backup sections. Divide the total weight of the alkane by the desorption efficiency to obtain the corrected mg sample.

$$\text{corrected mg sample} = \frac{\text{total weight}}{\text{desorption efficiency}}$$

(d) Add the corrected weights of the pentanes, hexanes, heptanes, and octanes present in the front and backup sections of the same sample tube to determine the total weight of the alkanes in the sample.

(e) The concentrations of alkanes in the air sampled can be expressed in mg cu m.

$$\text{mg cu m} = \frac{\text{corrected mg} \times 1000}{\text{air volume sample (liters)}}$$

WEST COMPANY APPLICATION FOR VARIANCE AND INTERIM ORDER; GRANT OF INTERIM ORDER

[42 FR 33316, July 1, 1977]

WEST CO. Application

AGENCY: Occupational Safety and Health Administration, Department of Labor.

ACTIONS: (1) Notice of application for variance and interim order; (2) Grant of Interim Order.

SUMMARY: This notice announces the application of The West Company for a variance and interim order pending a decision on the application for a variance from the standards prescribed in 29 CFR 1910.217(c)(3)(i)-(v) concerning machine guarding.

It also announces the granting of an interim order until a decision is rendered on the application for variance.

DATES: The effective date of the interim order is July 1, 1977. The last date for interested persons to submit comments is August 1, 1977. The last date for affected employers and employees to request a hearing on the application is August 1, 1977.

ADDRESSES: Send comments or requests for a hearing to:

Office of Variance Determination, Occupational Safety and Health Administration, U.S. Department of Labor, 200 Constitution Avenue NW, Room NS668, Washington, D.C. 20210.

FOR FURTHER INFORMATION CONTACT:

Mr. James J. Condon, Director, Office of Variance Determination, at the above address, telephone: 202-533-7121.

or the following Regional and Area Offices:

U.S. Department of Labor, Occupational Safety and Health Administration, Gateway Building, Suite 1825, 2835 Market Street, Philadelphia, Pa. 19104.

U.S. Department of Labor, Occupational Safety and Health Administration, William J. Green, Jr., Federal Building, 600 Arch Street, Room 4255, Philadelphia, Pa. 19106.

U.S. Department of Labor, Occupational Safety and Health Administration, 1515 Broadway (1 Astor Plaza)—Room 3445, New York, New York 10036.

U.S. Department of Labor, Occupational Safety and Health Administration, 519 Federal Street, Room 408, Camden, New Jersey 08101.

U.S. Department of Labor, Occupational Safety and Health Administration, 911 Walnut Street—Room 2000, Kansas City, Missouri 64106.

U.S. Department of Labor, Occupational Safety and Health Administration, 113 West 5th Street, North Platte, Nebraska 68101.

U.S. Department of Labor, Occupational Safety and Health Administration, 1315 Franklin Street, N.E.—Suite 267, Atlanta, Georgia 30309.

U.S. Department of Labor, Occupational Safety and Health Administration, Federal Office Building—Room 405, 316 New Bern Avenue, Raleigh, North Carolina 27601.

U.S. Department of Labor, Occupational Safety and Health Administration, 700 Tenth Street, Room 404, Tampa, Florida 33602.

1. Notice of Application

Notice is hereby given that The West Company, West Bridge Street, Phoenixville, Pa. 19380 has made application pursuant to section 6(d) of the Occupational Safety and Health Act of 1970 (29 Stat. 1396; 29 U.S.C. 655) and 29 CFR 1905.11 for a variance, and interim order pending a decision on the application for a variance, from the standards prescribed in 29 CFR 1910.217(c)(3)(i)-(v) mechanical power presses, point of operation.

The addresses of the places of employment that will be affected by the application are as follows:

The West Company, Incorporated, West Bridge Street, Phoenixville, Pa. 19380.

The West Company, Incorporated, 16th and C Streets, Millville, New Jersey 08302.

The West Company, Incorporated, P.O. Box 601, Huerfano, Nebraska 68347.

The West Company, Incorporated, North Carolina State Road, Kinston, North Carolina 28501.

The West Company, Incorporated, 5111 Park Street, N. St. Petersburg, Florida 33709.

The applicant certifies that employees who would be affected by the variance have been notified of the application by giving a copy of it to their authorized em-

ployee representative, and by posting a copy at all places where notices to employees are normally posted. Employees have also been informed of their right to petition the Assistant Secretary for a hearing.

Regarding the merits of the application, the applicant contends that it is providing a place of employment as safe as that required by § 1910.217(c)(3)(i)-(v) which requires that application of both of the operator's hands to machine operating controls and locating such controls at such a safety distance from the point of operation that the slide completes the downward travel or stops before the operator can reach into the point of operation with his hands. The applicant states that it uses O.B.I. ported presses with full revolution clutches. They are used in the manufacturing of its line of molded rubber pharmaceutical products. The applicant further states these presses are equipped with controls which conform to OSHA Regulations. These controls are of a two hand, single stroke, non-repeat type. Uniform inspections which conform with 1910.217(c)(1), (2), and (3) are regularly performed on the presses. The presses operate at 30 R.P.M., a few operate at 40 R.P.M., which is necessary for the products trimmed. They have three cranking points per revolution.

The applicant states that it bases its justification for the variance application on the use by the Company of a safety device which is not required by the standards, and which the Company claims does result in the operation being as safe as that required by the standards. This device consists of two pieces of P. pipe, each weighing about 15 pounds, designated called safety blocks or blocks which are used as safety stops between the upper and lower die shoes. The Company contends that these safety blocks are an integral part of the operation of all of the presses operated in the Company's plants. It further contends that the safety distance (DM) calculated using the formula contained in the above referenced OSHA Regulations yields a figure of 35.3 inches for the presses in question. If the variance sought were to be granted the resulting distance would be reduced to

CONOCO

Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date March 29, 1978
Subject Sample Analyses

We are sending via the company shuttle four charcoal tubes for Benzene, Alkanes, and Toluene Content, data sheets are attached.


J. J. MANGELINKX

1b

CC: NEO, THM, FILE(2)

3

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-3Z- 122 Lot No. of Tube 107
3. Sampling Date 3/29/78 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 773.2 mmHg, Temp. 25.6 °C.
5. Area the Sample Represents EPA TABLE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 20.6 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

(4)

222941

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake, Charles Refinery
2. Sample ID: LC-82- 123 Lot No. of Tube 107
3. Sampling Date 3/29/78 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 773.2 mmHg, Temp. 25.6 °C.
5. Area the Sample Represents RVP BATH
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 20.6 °C.
Pump Flow Rate 54 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000008990

(5)

730913

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 124 Lot No. of Tube 107
3. Sampling Date 3/25/78 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 773.2 mmHg, Temp. 25.4 °C.
5. Area the Sample Represents SAMPLE SLOP SINK
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 20.6 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

SAL 000008991

④ 222282

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BI- 125 Lot No. of Tube 107
3. Sampling Date 3/29/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 773.2 mmHg, Temp. 25.6 °C.
5. Area the Sample Represents 1ST TESTERS BALANCE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Date: Atmos. Press. 772.6 mmHg, Temp. 20.6 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

④ 22282

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 125 Lot No. of Tube 107
3. Sampling Date 3/29/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 773.2 mmHg, Temp. 25.6 °C.
5. Area the Sample Represents 1ST TESTERS BALANCE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 20.6 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM 8-hour time-weighted average Benzene 1.17 ppm, Toluene 11.93 ppm
by gas chromatograph analysis
The following concentrations of alkanes were present:

Pentane	15 ppm
Hexane	12 ppm
Heptane	7 ppm
Octane	1 ppm
Total	35 ppm

SAL 000008993

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730913

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BI- 124 Lot No. of Tube 107
3. Sampling Date 3/25/78 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 773.2 mmHg, Temp. 25.4 °C.
5. Area the Sample Represents SAMPLE SLOP SINK
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 20.6 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. Sample Procedure: Personal Sampling pump worn in job performance

10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM 8-hour time-weighted average benzene 4.29ppm, toluene 42.04ppm

by gas chromatograph analysis

The following concentrations of alkanes were present:

*Pentane 16 ppm
Hexane 28 ppm
Heptane 26 ppm
Octane 8 ppm
Total 78 ppm*

(4)

222941

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 123 Lot No. of Tube 107
3. Sampling Date 3/29/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 773.2 mmHg, Temp. 25.6 °C.
5. Area the Sample Represents RVP BATH
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 20.6 °C.
Pump Flow Rate 54 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:

PPM: 8-hour time-weighted average benzene = 1.07 ppm, toluene = 10.32 ppm

by gas chromatography analysis.

The following concentrations of alkanes were present:

Pentane 15 ppm
Hexane 11 ppm
Heptane 7 ppm
Octane 1 ppm
Total 35 ppm

SAL 000008995

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BI-122 Lot No. of Tube 107
3. Sampling Date 3/29/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 773.2 mmHg, Temp. 25.6 °C.
5. Area the Sample Represents EPA TABLE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 772.6 mmHg, Temp. 20.6 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:

PPM Benzene 1.05 5-hour time-weighted average. Hexane 10.67 ppm by gas chromatography analysis.
The following concentrations of alkanes were present.

Pentane	16 ppm
Hexane	12 ppm
Heptane	3 ppm
Octane	2 ppm
Total	30 ppm

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 121 Lot No. of Tube 107
3. Sampling Date 3/15/78 Time Started 7³⁰ AM Time Ended 3⁰⁰ PM
Elapsed Time 7.5 HOURS
4. Atm. Press. 764 mmHg, Temp. 22.2 °C.
5. Area the Sample Represents GRAVITY TABLE,
2ND TESTER
6. Name of Person Who Took the Sample BERNARD BOURGEOIS
7. Pump Calibration Data: Atmos. Press. 763 mmHg, Temp. 20.0 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM _____

The eight hour average time weighted benzene was 0.56 ppm by gas chromatograph analysis.

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32-120 Lot No. of Tube 107
3. Sampling Date 3/15/78 Time Started 7³⁰AM Time Ended 3⁰⁰PM
Elapsed Time 7.5 HOURS
4. Atm. Press. 744 mmHg, Temp. 22.2 °C.
5. Area the Sample Represents 1ST TESTER, LABORATORY
-
6. Name of Person Who Took the Sample HARRY JOUETT
7. Pump Calibration Data: Atmos. Press. 763 mmHg, Temp. 20.0 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM

The eight hour average time weighted benzene was 0.84 ppm by gas chromatograph analysis.

DATA SHEET

ANCIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery

2. Sample ID: LC-82- 117 Lot No. of Tube 107

3. Sampling Date 3/15/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS

4. Atm. Press. 764 mmHg, Temp. 22.2 °C.

5. Area the Sample Represents GLC ROOM

6. Name of Person Who Took the Sample N/A

7. Pump Calibration Data: Atmos. Press. 763 mmHg, Temp. 20.0 °C.
Pump Flow Rate 50 cc's/min.

8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. Sample Procedure: Personal Sampling pump worn in job performance

10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM _____

The eight hour average time weighted benzene was 0.12 ppm by gas chromatograph analysis.

2

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32-118 Lot No. of Tube 107
3. Sampling Date 3/15/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 744 mmHg, Temp. 22.2 °C.
5. Area the Sample Represents KNOCK ROOM, GASOLINE
BLENDING AREA
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 763 mmHg, Temp. 20.0 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM

The eight hour average time weighted benzene was 0.30 ppm by gas chromatograph analysis.

SAL 000009000

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BE-119 Lot No. of Tube 107
3. Sampling Date 3/15/78 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 744 mmHg, Temp. 22.2 °C.
5. Area the Sample Represents 2ND TESTERS SAMPLE
DISPOSAL SINK
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 763 mmHg, Temp. 20.0 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

The eight hour average Time weighted benzene was 3.59 ppm by gas chromatograph analysis.

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

27.2
27.2
300.2

1. Plant: Lake Charles Refinery
2. Sample ID: LC-SZ- 116 Lot No. of Tube 107
3. Sampling Date 3/14/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 754 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents KNOCK ROOM, COOL TABLE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 761 mmHg, Temp. 20.0 °C.
Pump Flow Rate 47 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. Sample Procedure: Personal Sampling pump worn in job performance

10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM

The eight hour average time weighted benzene was 0.37 ppm by gas chromatograph analysis.

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BI- 115 Lot No. of Tube 107
3. Sampling Date 3/14/78 Time Started 7⁰⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 744 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents CHEMIST'S SOUTHEAST
LAB TABLE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 761 mmHg, Temp. 20.0 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. Sample Procedure: Personal Sampling pump worn in job performance

10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM _____

The eight hour average time weighted benzene was 0.40 ppm by gas chromatograph analysis.

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140706

DATA SHEET

AMBIENT AIR SAMPLES (C-ARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BI- 114 Lot No. of Tube 107
3. Sampling Date 3/14/78 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 744 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents 1ST TESTERS BALANCE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 741 mmHg, Temp. 20.0 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

The eight hour average time weighted benzene was 0.93ppm by gas chromatograph analysis.

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 112 Lot No. of Tube 107
3. Sampling Date 3/14/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 744 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents VAPOR PRESSURE BATH
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 741 mmHg, Temp. 20.0 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

The eight hour average time weighted benzene was 2.26 ppm by gas chromatograph analysis.

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BI- 113 Lot No. of Tube 107
3. Sampling Date 3/14/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 764 mmHg, Temp. 27.2 °C.
5. Area the Sample Represents EPA TABLE
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 761 mmHg, Temp. 20.0 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:

PPM _____

The eight hour average time weighted benzene was 1.18 ppm by gas chromatograph analysis.

SAL 000009006

Interoffice Communication

To K. C. Hunt, Refining, Ponca City
From J. J. Mangelinkx, Refining, Lake Charles
Date March 15, 1978
Subject Sample Analyses

We are sending via the company shuttle five charcoal tubes for Benzene Content, data sheets are attached. These samples were taken to gather Laboratory Air Circulation Data.


J. J. Mangelinkx

1b
CC: MEO, THM, FILE(2)

SAL 000009007

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DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-82- 107 Lot No. of Tube 107
3. Sampling Date 3/9/78 Time Started 7⁰⁰ AM Time Ended 2⁴⁵ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 768 mmHg, Temp. 23.0 °C.
5. Area the Sample Represents LABORATORY, 2ND TESTER
GRAVITY TABLE
6. Name of Person Who Took the Sample PAUL OAKMAN
7. Pump Calibration Data: Atmos. Press. 769 mmHg, Temp. 21.1 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM

8-hour time weighted average Benzene 0.96 ppm by
Gas Chromatography analysis

09400

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 108 Lot No. of Tube
3. Sampling Date 3/9/78 Time Started 7⁰⁰ AM Time Ended 2⁴⁵ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 768 mmHg, Temp. 23.0 °C.
5. Area the Sample Represents LABORATORY, 2ND TESTER
DISTILLATION TABLE
6. Name of Person Who Took the Sample HENRY COLEMAN
7. Pump Calibration Data: Atmos. Press. 769 mmHg, Temp. 21.1 °C.
Pump Flow Rate 54 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. Sample Procedure: Personal Sampling pump worn in job performance

10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM

8 hour time weighted average benzene 0.62 ppm
by gas chromatograph analysis.

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 109 Lot No. of Tube 107
3. Sampling Date 3/9/78 Time Started 7⁰⁰ AM Time Ended 2⁴⁵ PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 768 mmHg, Temp. 23.0 °C.
5. Area the Sample Represents LABORATORY, 1ST TESTER
6. Name of Person Who Took the Sample ARTHUR GUILLORY
7. Pump Calibration Data: Atmos. Press. 769 mmHg, Temp. 21.1 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

8-hour time weighted average benzene 0.97 ppm
by Gas Chromatograph analysis

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 110 Lot No. of Tube 107
3. Sampling Date 3/9/78 Time Started 7⁰⁰AM Time Ended 2⁴⁵PM
Elapsed Time 7.8 HOURS
4. Atm. Press. 748 mmHg, Temp. 23.0 °C.
5. Area the Sample Represents LABORATORY, SPECIAL
TESTER, OCTANE ANALYST
6. Name of Person Who Took the Sample ALLEN BOUDREAU
7. Pump Calibration Data: Atmos. Press. 749 mmHg, Temp. 21.1 °C.
Pump Flow Rate 49 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:

PPM

*8 hour time weighted average Benzene 0.25 ppm
by gas chro. atograph analysis.*

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DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 111 Lot No. of Tube 107
3. Sampling Date 3/9/78 Time Started 7³⁰AM Time Ended 3³⁰AM
Elapsed Time 8.0 HOURS
4. Atm. Press. 768 mmHg, Temp. 23.0 °C.
5. Area the Sample Represents GAS CHROMATOGRAPHY
CHEMIST
6. Name of Person Who Took the Sample GARY EAGAN
7. Pump Calibration Data: Atmos. Press. 769 mmHg, Temp. 21.1 °C.
Pump Flow Rate 50 cc's/MIN
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM _____

8 hour time weighted average benzene 0.18 ppm
by gas chromatograph analysis.

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ- 117 Lot No. of Tube 107
3. Sampling Date 3/15/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 764 mmHg, Temp. 22.2 °C.
5. Area the Sample Represents G L C ROOM
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 763 mmHg, Temp. 20.0 °C.
Pump Flow Rate 50 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

2

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BI-118 Lot No. of Tube 107
3. Sampling Date 3/15/78 Time Started 7³⁰AM Time Ended 3³⁰PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 764 mmHg, Temp. 22.2 °C.
5. Area the Sample Represents KNOCK ROOM, GASOLINE
BLENDING AREA
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 763 mmHg, Temp. 20.0 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.

9. Sample Procedure: Personal Sampling pump worn in job performance

10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph

11. TSL Analysis Data:

PPM _____

SAL 000009014

181925

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-BZ-119 Lot No. of Tube 107
3. Sampling Date 3/15/78 Time Started 7³⁰ AM Time Ended 3³⁰ PM
Elapsed Time 8.0 HOURS
4. Atm. Press. 744 mmHg, Temp. 22.2 °C.
5. Area the Sample Represents 2ND TESTERS SAMPLE
DISPOSAL SINK
6. Name of Person Who Took the Sample N/A
7. Pump Calibration Data: Atmos. Press. 763 mmHg, Temp. 20.0 °C.
Pump Flow Rate 51 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM _____

SAL 000009015

(5) 490839

DATA SHEET

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

1. Plant: Lake Charles Refinery
2. Sample ID: LC-32- 120 Lot No. of Tube 107
3. Sampling Date 3 / 15 / 78 Time Started 7:30 AM Time Ended 3:00 PM
Elapsed Time 7.5 HOURS
4. Atm. Press. 744 mmHg, Temp. 22.2 °C.
5. Area the Sample Represents 1ST TESTER, LABORATORY
6. Name of Person Who Took the Sample HARRY JOUETT
7. Pump Calibration Data: Atmos. Press. 743 mmHg, Temp. 20.0 °C.
Pump Flow Rate 48 cc's/min.
8. Remarks: Include any pertinent information such as spills, leaks, sampling for lab, etc. if any, which may be cause for abnormal escape of hydrocarbons into the air.
9. Sample Procedure: Personal Sampling pump worn in job performance
10. Sampling and analytical method:
Absorption or charcoal
Desorption with carbon disulfide
Gas chromatograph
11. TSL Analysis Data:
PPM

SAL 000009016