ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT

Month: December, 1984
Date of Report: 1/29/85

I. Routine Chemical Dosimetry

All Sample Results

Chemical	< PEL		> PEL (OVEREXPOSURES)	
	No.	%	No.	%
VCM	85	95.5	4	4.5
Lead	7	100.0	0	0.0
Total Particulates	5	100.0	0	0.0

Overexposures

Job Class	Exposure	Source
Reactor Operator	1.9* ppm, VCM	Employee overexposed while washing out the new unit chemwash tank.
Yard Operator	2.0* ppm, VCM	Employee overexposed while unloading VCM railcars.
Reactor Operator	1.7* ppm, VCM	Employee overexposed while locating leaks at 903 recovery compressor, the new unit fresh VCM filter pack and atop 741 reactor.
Electrician	1.2** ppm, VCM	The employee was overexposed while greasing pump drive motors in the new unit. The specific cause is not known. However, an upset condition involving draining of the chemwash heater is suspect.

* Respiratory protection was worn.
** Respiratory protection was not worn.

II. VCM Dosimetry Program

Two major changes were made in the program:

A. Vinyl department shift workers are now being scheduled by job classification instead of by name as in the past. The scheme also results in a more random schedule with respect to time of day and day of week.

B. Dosimetry equipment handling methods were simplified by reducing the number of people who handle each sample. All REAL badge carbon handling is now being done by lab personnel.

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IV. Ventilation Measurement

The Anemotherm model 60 "hot-wire" velometer was returned to the factory for repair.

Jerald V. Uptain

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Distribution: JF, JWW, DWH, PJK, WFH, CRS, RAF, AHS, JRW
Tom Grumbles, J. R. Drumwright, M.D. - Houston

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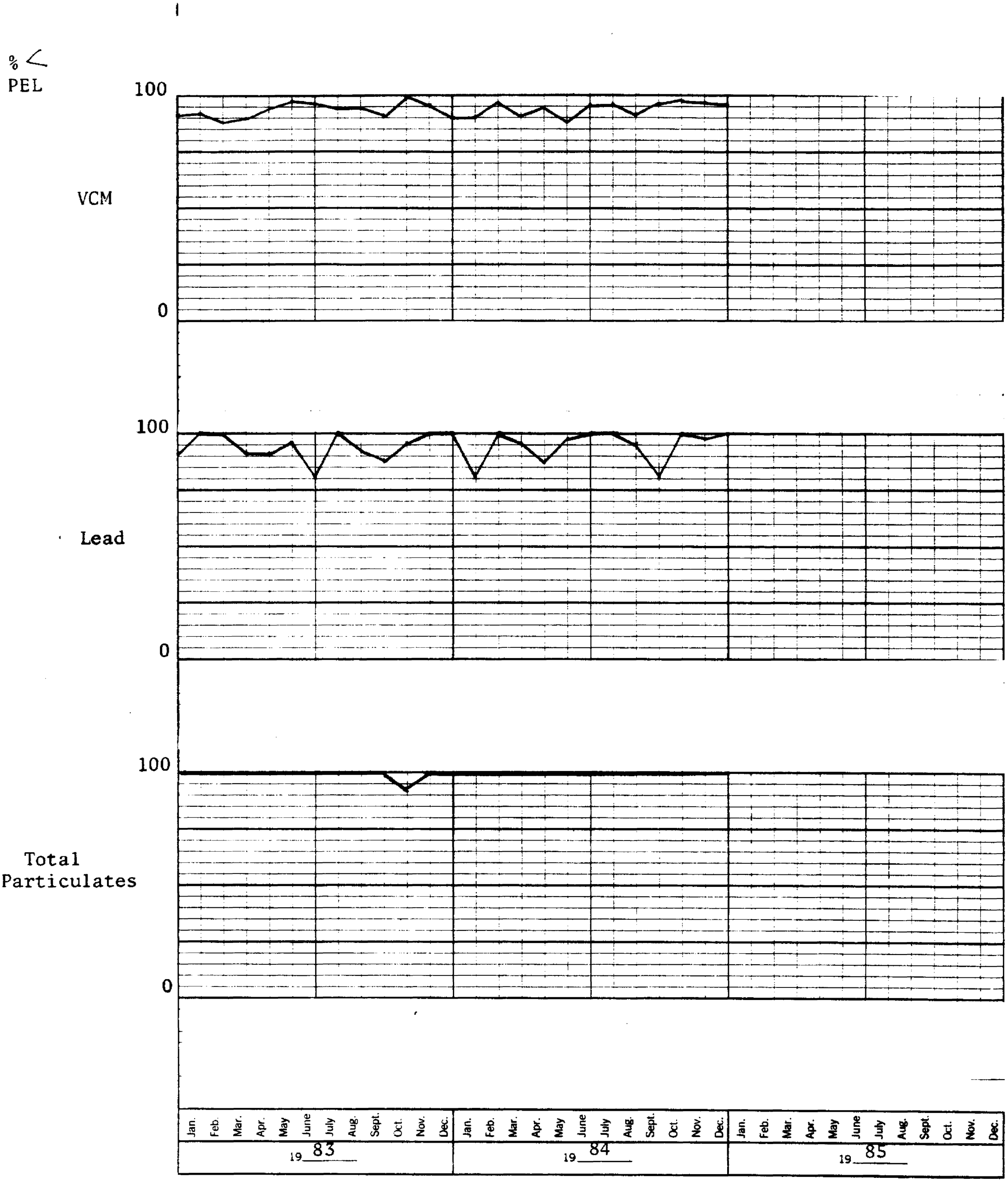
ABERDEEN CHEMICAL PLANT

CHEMICAL DOSIMETRY TRENDS



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ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT

Month: November

Date of Report: 1/04/85

Routine Chemical Dosimetry

All Sample Results:

Chemical	< PEL No.	< PEL %	> PEL Overexposures No.	> PEL Overexposures %
VCM	92	97	3	3
Lead	18	95	1	5
Total Particulates	6	100	0	0

Overexposures

Job Class	Exposure	Source
General Mechanic	1.1** ppm, VCM	Employee overexposed while welding cracks in the dry blend "gump" screener bowl. The specific cause of the overexposure has not been identified.
General Mechanic	2.0** ppm, VCM	The employee spent his entire work period doing insulation work in the new Vinyl unit. The specific cause of his overexposure has not been identified.
Yard Operator	4.6* ppm, VCM	Employee overexposed while hooking/unhooking VCM railcars.
Color Weigh Compounder	56.6* microgram lead/m^3	Employee overexposed while weighing up micro quantities of Epistatic 112 and Epistatic 122 inside the color weigh room.

* Respiratory protection was worn.
** Respiratory protection was not worn.

Area VCM Sampling

Seven, 8½ hour area VCM samples were taken inside the V-10 building during the reclaim of "pond" resin using REAL "minimonitor" badges. The results (below) demonstrate that while VCM levels exist during the operation, they are below the "Action Level" of 0.5 ppm, and well below the permissible exposure limit (PEL) which requires respiratory protection. However, the person observing pond resin pump-up should continue to wear a respirator while in V-10.

Sample Location	Sample Result, ppm, VCM
First floor of V-10, column between and just north of dryers	0.1
First floor of V-10, blower just north of east dryer	0.1
First floor of V-10, column between and just north of blend tanks	0.1
First floor of V-10, between 551 and 553 blend tanks	0.1
Above and between blend tanks, V-10	0.3
V-10 centrifuge deck at airline station just northwest of 550 blend tank	0.4
Just above V-10 east dryer line Sweco screener.	0.4

Equipment Calibration

The fourth quarter calibration of the precision rotameter used to measure Bendix BDX 44 air pump flowrates was completed using a large "bubble tube" as a primary standard.

Area Ventilation Checks

The fourth quarter check of lab ventilation hood velocities and flow rates was completed. The results were reported to the lab for correction of one deficiency found.

Ginny Belk, R.N.
Plant Nurse

rah

cc: JF, JWW, DWH, PJK, WFH, CRS, RAF, AHS, JVU, JRW
Tom Grumbles, J. R. Drumwright, M.D. - Houston

ABERDEEN CHEMICAL PLANT

CHEMICAL DOSIMETRY TRENDS

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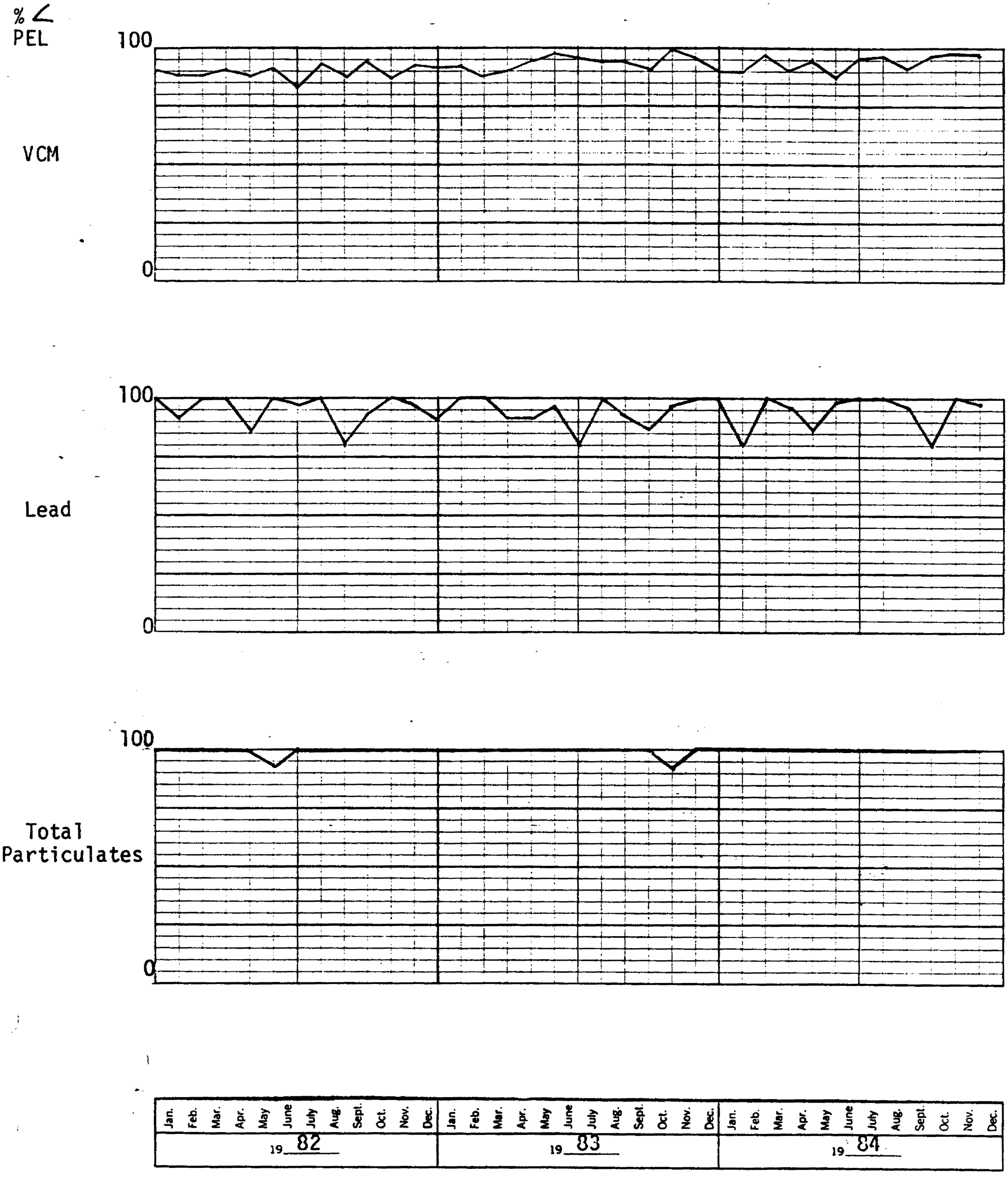

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ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT

Month: October

Date of Report: 11/15/84

Routine Chemical Dosimetry

All Sample Results:

	< PEL		> PEL Overexposure	
Chemical	No.	%	No.	%
VCM	88	95.7	4	4.3
Lead	32	100	0	0
Total Particulates	3	100	0	0

Overexposures

Job Class	Exposure	Source
Reactor Operator	23.5* ppm, VCM	Employee overexposed while changing VCM filters in the new unit.
Reactor Operator	2.6* ppm, VCM	Employee overexposed while rinsing out the chem wash tank.
Reactor Operator	16.1* ppm, VCM	Employee overexposed while changing VCM filters in the new unit.
Instrument Technician	7.6** ppm, VCM	Employee overexposed while changing a sightglass on the south knockout pot in the new unit recovery area.

* Respiratory protection was worn.
** Respiratory protection was not worn.

OSHA Hazard Communication Rule

An inventory of chemicals used in the plant was conducted. This will be the basis of the initial list of hazardous plant chemicals required under this OSHA standard.

Respiratory Protection

A report on the third quarter audit of the plant respiratory protection program was issued.

The Aberdeen plant respirator training class outline was updated and copies made available for department use.

Ginny Belk, R.N.
Plant Nurse

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cc: JF, JWW, DWH, PJK, WFH, CRS, RAF, AHS, JVU, JRW
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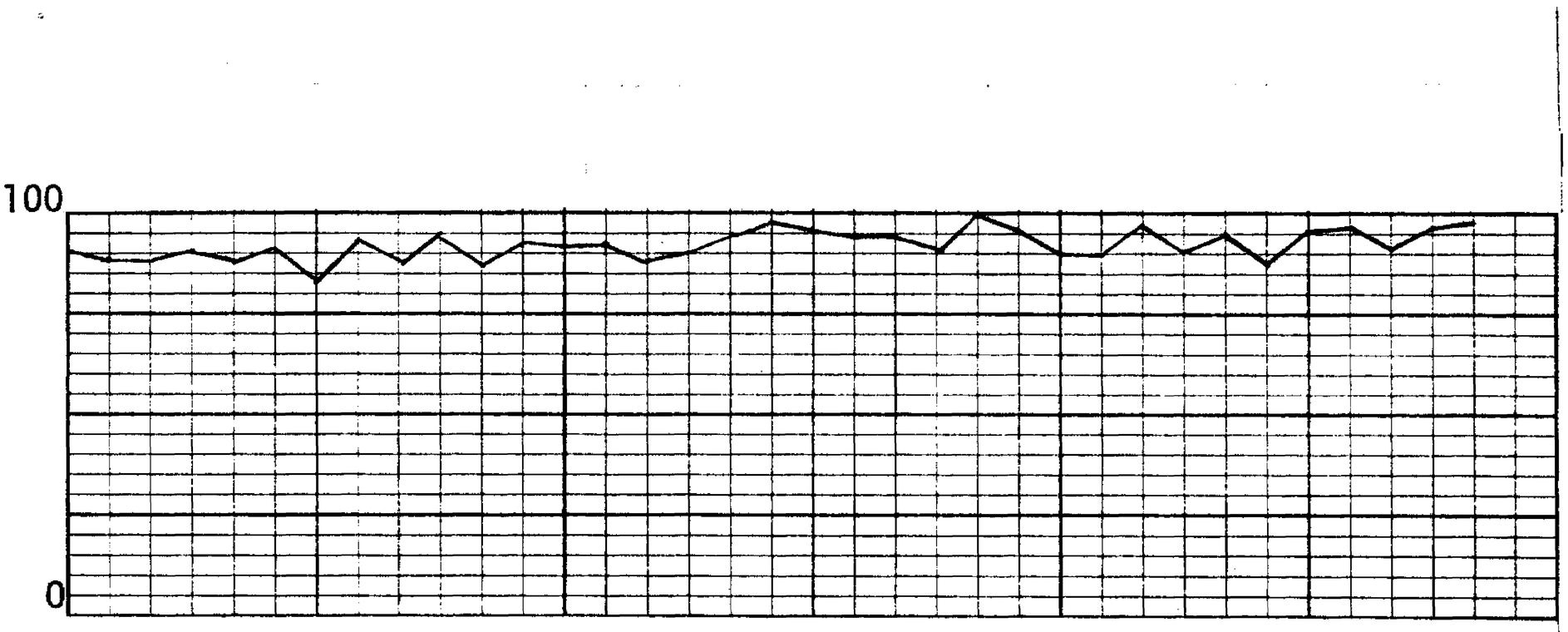
ABERDEEN CHEMICAL PLANT

CHEMICAL DOSIMETRY TRENDS



ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT

Month: September

Date of Report: 10/25/84

Routine Chemical Dosimetry

All Sample Results:

Chemical	< PEL		> PEL Overexposures	
	No.	%	No.	%
VCM	86	95.6	4	4.4
Lead	8	80	2	20
Total Particulates	5	100	0	0

Overexposures

Job Class	Exposure	Source
Lead Operator	2.2**ppm, VCM	Employee overexposed while working in the vicinity of a VCM filter pak filter change in the new unit.
General Mechanic	1.5**ppm, VCM	Employee overexposed while changing 743 reactor chem wash sprayhead.
Yard Operator	1.3*ppm, VCM	Employee overexposed while hooking/unhooking VCM railcars at the VCM tank farm.
Yard Operator	1.3*ppm, VCM	Employee overexposed while hooking/unhooking VCM railcars at the VCM tank farm.
Color Weigh Compounder	68.8* microgram Lead/m^3	Employee overexposed while doing his routine job of color weigh-up. No specific cause for the overexposure has been identified. The two lead materials handled were Epistatic 112 and Cyastab 988.
Line I Compounder	139.1* microgram Lead/m^3	Employee overexposed while charging Epistatic 112 into blends of 34431 Natural on Line I.

* Respiratory protection was worn.

** Respiratory protection was not worn.

Respiratory Protection

An audit of the plant respiratory protection program was conducted. A report on the deficiencies found, along with the associated, corrective measures, will be issued during October.

Area Ventilation Checks

The third quarter check of lab and compound ventilation hood velocities and flow rates was completed. The results were reported to the two departments for correction of the deficiencies found.

Material Safety Data Sheets

Material Safety Data Sheets for compound were copied and issued to the Compound Operations Supervisor. Three copies of each Material Safety Data Sheet for the Vinyl Department were issued to the Vinyl Operations Supervisor.

Ginny Belk, R.N.
Plant Nurse

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cc: JF, JWW, DWH, PJK, LPS, WFH, CRS, RAF, AHS, JVU
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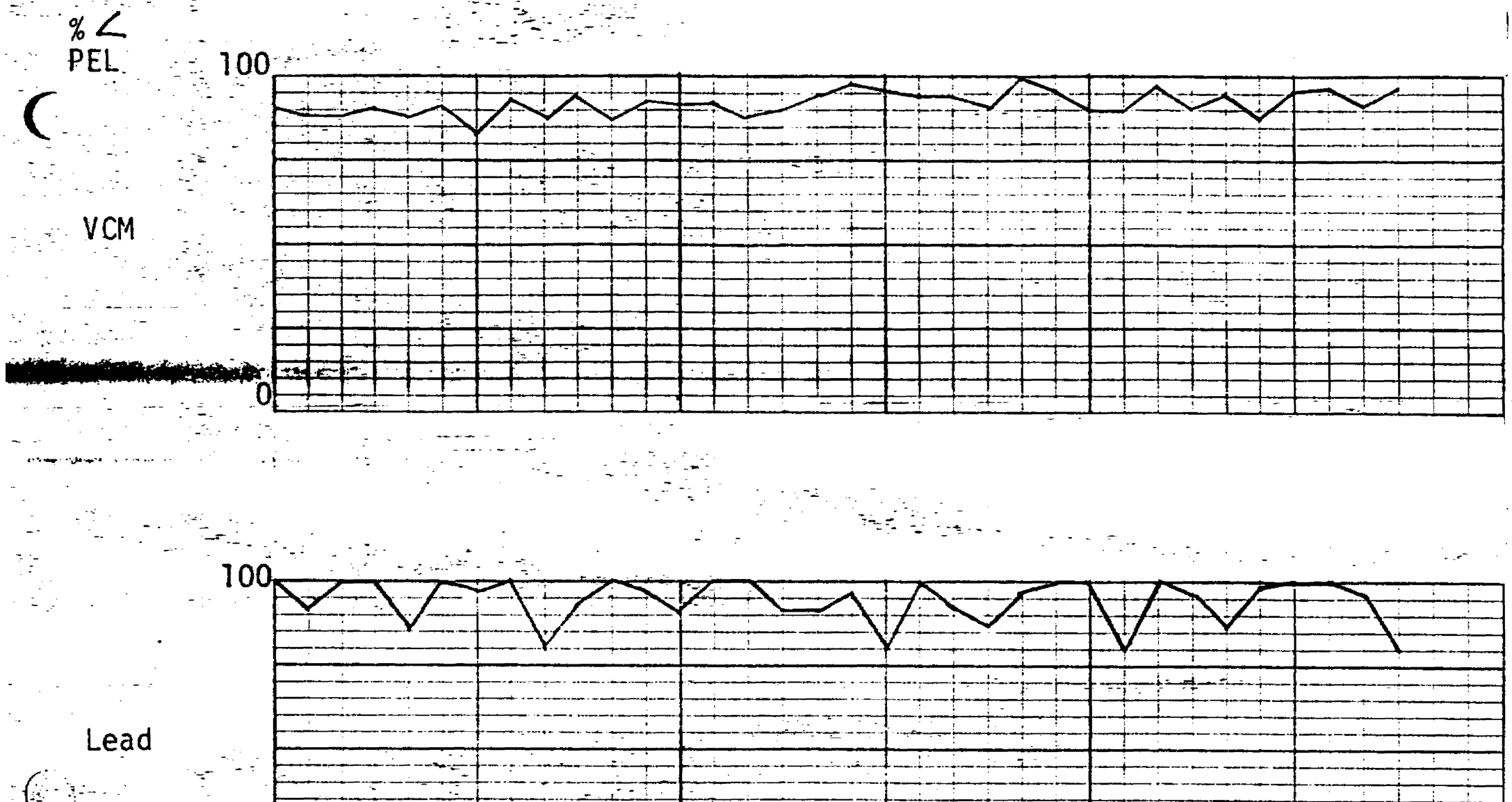
ABERDEEN CHEMICAL PLANT

CHEMICAL DOSIMETRY TRENDS



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ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT 'R E V I S E D'

Month: August

Date of Report: 10/4/84

Routine Chemical Dosimetry

All Sample Results:

Chemical	< PEL No.	< PEL %	> PEL OVEREXPOSURES No.	> PEL OVEREXPOSURES %
VCM	85	91.4	8	8.6
Lead	24	96.0	1	4.0
Total Particulates	6	100.0	0	0.0

Overexposures

Job Class	Exposure	Source
Chief Operator	1.2* ppm, VCM	Employee overexposed while changing VCM filter pack filters.
Reactor Operator	10.1** ppm, VCM	Employee overexposed while doing his regular job of reactor operator in the old unit. No specific cause for his overexposure has been determined.
Reactor Operator	1.4* ppm, VCM	Employee overexposed while sampling 745 reactor.
Reactor Operator	2.9** ppm, VCM	Employee overexposed while training a fellow employee and a reactor operator in the old unit. No specific cause for the overexposure has been identified.

JVL A

ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT

Month: August

Date of Report: 10/4/84

Routine Chemical Dosimetry

All Sample Results:

Chemical	< PEL No.	< PEL %	> PEL OVEREXPOSURES No.	> PEL OVEREXPOSURES %
VCM	93	91.4	8	8.6
Lead	24	96.0	1	4.0
Total Particulates	6	100.0	0	0.0

Overexposures

Job Class	Exposure	Source
Chief Operator	1.2* ppm, VCM	Employee overexposed while changing VCM filter pack filters.
Reactor Operator	10.1** ppm, VCM	Employee overexposed while doing his regular job of reactor operator in the old unit. No specific cause for his overexposure has been determined.
Reactor Operator	1.4* ppm, VCM	Employee overexposed while sampling 745 reactor.
Reactor Operator	2.9** ppm, VCM	Employee overexposed while training a fellow employee and a reactor operator in the old unit. No specific cause for the overexposure has been identified.

Overexposures	Exposure	Source
Dryer Utility	1.1** ppm, VCM	Employee overexposed while being trained as a reactor operator in the old unit. No specific cause for the overexposure has been identified.
Yard Operator	2.6* ppm, VCM	The employee was overexposed while hooking/unhooking VCM railcars at the VCM tank farm.
Mechanic	1.9** ppm, VCM	Employee overexposed while blanking out D-300 reactor condenser prior to condenser drilling.
Mechanic	6.2* ppm, VCM	Employee overexposed while changing out two Corken compressors at the VCM tank farm.
Line Compounder	44.4* microgram Lead/m^3	The product being produced during sampling time contained no lead. The source of the overexposure is not clear; it may be related to housekeeping in the area.

* Respiratory protection was worn.

** Repsiratory protection was not worn.

VCM Area Monitoring

Four, forty-minute VCM area samples were taken at the top of 502 blend tank during the transfer of 5385 resin slurry from D-700 reactors using REAL "Minimonitor" badges. Wind direction was from west to east, ranging between zero and five miles per hour. The results indicate, as have previous studies, that VCM concentrations atop blend tanks may reach levels that require the use of respirators during slurry transfer, depending on a variety of variables including wind conditions. Because of this, respirators should continue to be used during work atop the tanks.

No.	Location	Result (ppm, VCM)
1	Top and SW of 502, on Safety Railing	< 0.1
2	Top and NW of 502, on Safety Railing	< 0.1
3	Top and SE of 502, on Safety Railing	< 0.1
4	Top and NE of 502, on Safety Railing	3.3

Plasticizer-in-Air Monitoring

The results of plasticizer-in-air samples taken at the mills on Compound Lines I and III during July appear below. Sampling equipment consisted of Bendix BDX 44 air pumps equipped with Gelman 37MM cellulose filters. Sample analysis involved solvent extraction, followed by liquid chromatography. The single high result occurred during a period in which the "belt" of compound near the sampler was "smoking" excessively (for no obvious reason). A similar sample (#3), taken two hours later and at the same location, showed a hundred-fold decrease.

No.	Compound Line	Date (Time)	Compound	Plast.	Location	Result (mg/m^3)
1	3	7/23/84 (1118)	38601 Blk	610P	SW Corner, E Take Off Belt	22.7
3	3	7/23/84 (1318)	38601 Blk	610P	SW Corner, E Take Off Belt	0.2
4	3	7/25/84 (1012)	3934-152-Blk	610P	SE Corner, W Take Off Belt	0.2
5	3	7/25/84 (1012)	3934-152-Blk	610P	SW Corner, E Take Off Belt	0.2
2	1	7/23/84 (1314)	34642 Nat	108P	Oper. Station at Mill "Face"	0.2
6	1	7/25/84 (1055)	34642 Nat	108P	Oper. Station at Mill "Face"	0.2

Equipment Calibration

The third quarter calibration of the precision rotameter used to measure Bendix BDX 44 air pump flowrates was completed using a large "bubble tube" as a primary standard. No significant drift was seen.

Ginny Belk, R.N.
Ginny Belk, R.N.
Plant Nurse

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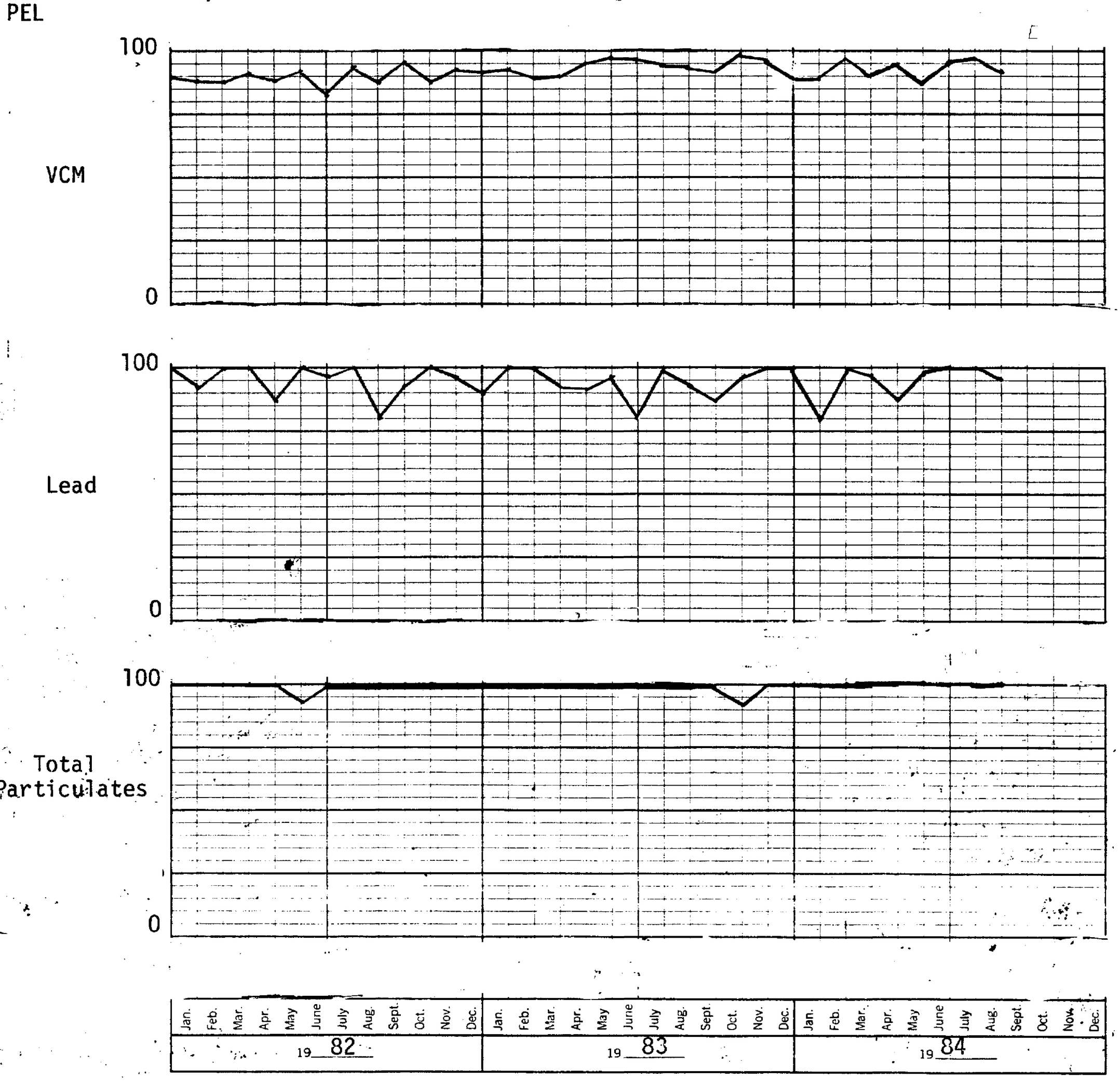
ABERDEEN CHEMICAL PLANT

CHEMICAL DOSIMETRY TRENDS



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ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT

Month: July

Date of Report: Aug. 14, 1984

Routine Chemical Dosimetry

All Sample Results:

Chemical	< PEL No.	< PEL %	> PEL Overexposures No.	> PEL Overexposures %
VCM	90	97	3	3
Lead	25	100	0	0
Total Particulates	4	100	0	0

Overexposures

Job Class	Exposure	Source
Lead Operator	1.3** ppm,VCM	1. The employee states that he spent his entire shift inside the vinyl control room. No reason for his overexposure has been identified.
Yard Operator	1.7* ppm, VCM	2. Employee overexposed while hooking/unhooking VCM rail-cars and Corken compressor for maintenance at the VCM tank farm.
Mechanic	50.3* ppm, VCM	3. Employee overexposed while changing out a valve in a VCM line in the old unit.

* Respiratory protection was worn.

** Respiratory protection was not worn.

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VCM Area Monitoring

One sample was taken at each of the ten large reactor condensers, using REAL "minimontor" badges. The elevated results in the new unit (741-745) were traced to leaks repaired on the same day of sampling.

Date	Reactor	Resin	Sample Time	Result ppm, VCM
7/25/84	741	5425	8 Hrs., 17 Min.	1.1
7/25/84	742	5425	8 Hrs., 17 Min.	0.8
7/25/84	743	5425	8 Hrs., 17 Min.	1.5
7/25/84	744	5425	8 Hrs., 17 Min.	0.9
7/25/84	745	5265	8 Hrs., 17 Min.	0.3
7/26/84	D300	5385	7 Hrs., 50 Min.	< 0.1
7/26/84	D400	5385	7 Hrs., 50 Min.	< 0.1
7/26/84	D500	5385	7 Hrs., 50 Min.	0.3
7/26/84	D600	5835	7 Hrs., 50 Min.	< 0.1
7/26/84	D700	5385	7 Hrs., 50 Min.	0.4

Plasticizer-in-air Monitoring

Six plasticizer-in-air samples were taken at the mills on Compound Lines I and III, using Bendix BDX44 air pumps and Gelman cellulose filters. The results will be reported following lab analysis of the samples.

Lead Dosimetry Analysis

The plant began using the services of CTEK, Inc., a Dallas, Texas based laboratory, for analysis of routine lead dosimetry samples. The benefits gained are reduced cost and reduced analysis turn-around time.

Noise Control Report and Plan

The annual Noise Contol Report and Plan was issued.

OSHA "Hazard Communication" Rule

Tentative plans were laid for achieving compliance with the OSHA "Hazard Communication" rule. The first step, establishing a list of plant chemicals by manufacturer and tradename, is planned to commence during August.

Material Safety Data Sheets

A copy of nine Material Safety Data Sheets were issued to the Maintenance Department. Material Safety Data Sheets for Plasticizer and Dry Blend were copied and issued to the Compound Operations Supervisor.

Ginny Belk, R.N.

Ginny Belk, R.N.
Plant Nurse

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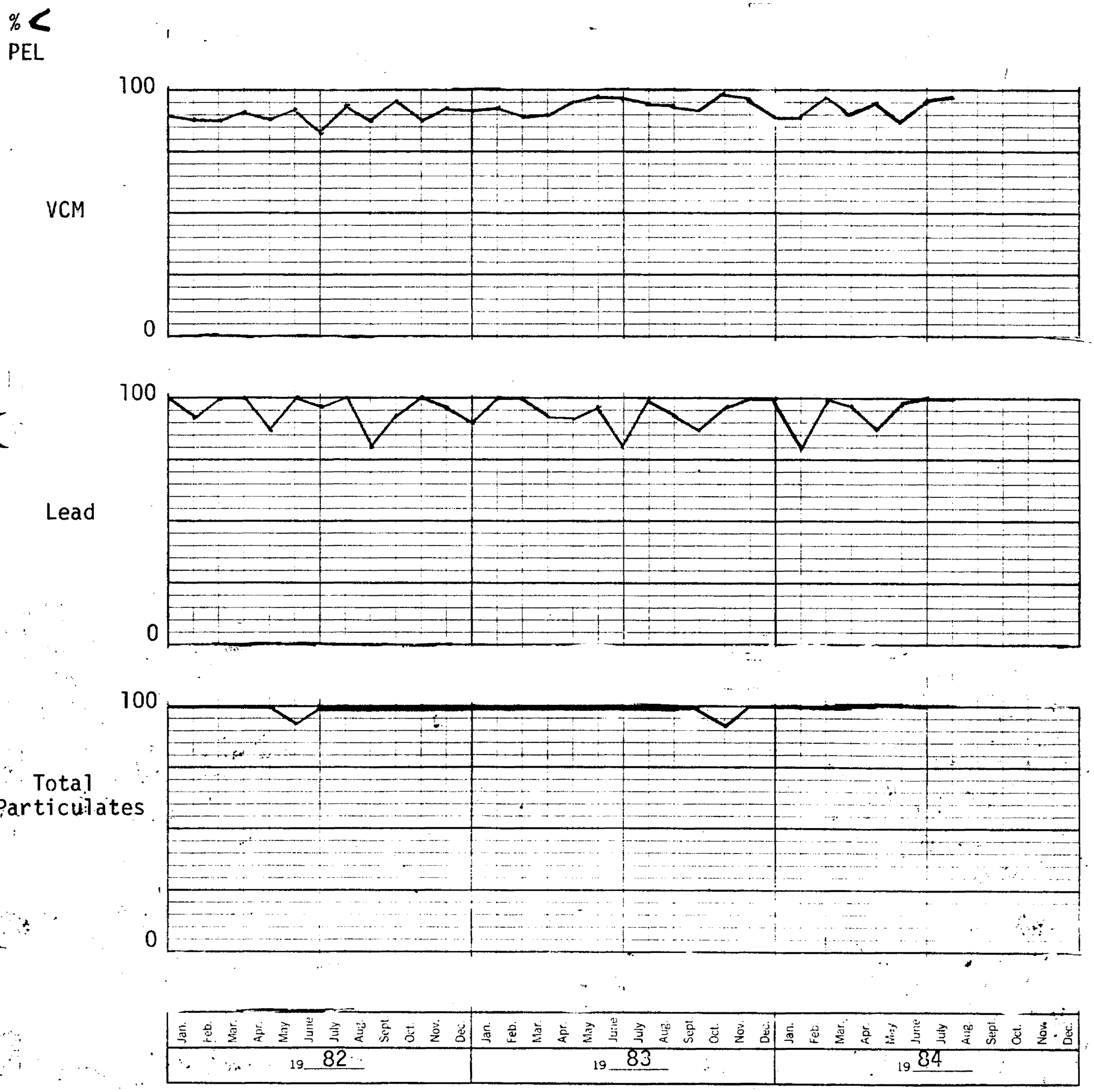
CHEMICAL DOSIMETRY TRENDS



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ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT

Month: June
Date of Report: July 19, 1984

1. Routine Chemical Dosimetry
All Sample Results:

Chemical	≤ PEL No.	≤ PEL %	> PEL OVEREXPOSURES No.	> PEL OVEREXPOSURES %
VCM	93	96	4	4
Lead	10	100	0	0
Total Particulates	5	100	0	0

Overexposures

Job Class	Exposure	Source
Chief Operator	3.7*ppm, VCM	Employee overexposed while blocking in a VCM transfer pump which had a blown seal.
Lead Operator	4.8*ppm, VCM	Employee overexposed while pumping "pond" resin.
Rx Operator	3.9*ppm, VCM	Employee overexposed while changing VCM filter pak filters.
Mechanic	82.2*ppm, VCM	Employee overexposed while removing the main VCM valve going to the recovery system in the new unit.

* Respiratory protection was worn.

** Respiratory protection was not worn.

Respiratory Protection

3M airhat battery charging was made more reliable when compound operations provided each airhat wall case with an internal 110V electrical outlet and battery charger.

Dosimetry Equipment

The lab evaluation of the passive monitor marketed by GMD Systems, Inc. was completed during June. Future use of the device will be reconciled following issue of the report on the evaluation July.

Program Audits

Routine Dosimetry

The second quarter audit of dosimetry frequency versus plan was conducted. No deficiencies were found.

Respiratory Protection

An audit of the plant respiratory protection program was conducted. Recommendations for improvement, based on the audit results, were made and discussed with each department that uses respirators.

Material Safety Data Sheets

MSDS were reviewed by the Compound Department. A copy of each MSDS that pertains to the Compound, Dry Blend, and Plasticizer Department will be issued to the Compound Operations Supervisor.

Ginny Belk, R.N.
Plant Nurse

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cc: JF, CRM, DWH, PJK, LPS, WFH, CRS, RAF, RAM, AHS, JVU
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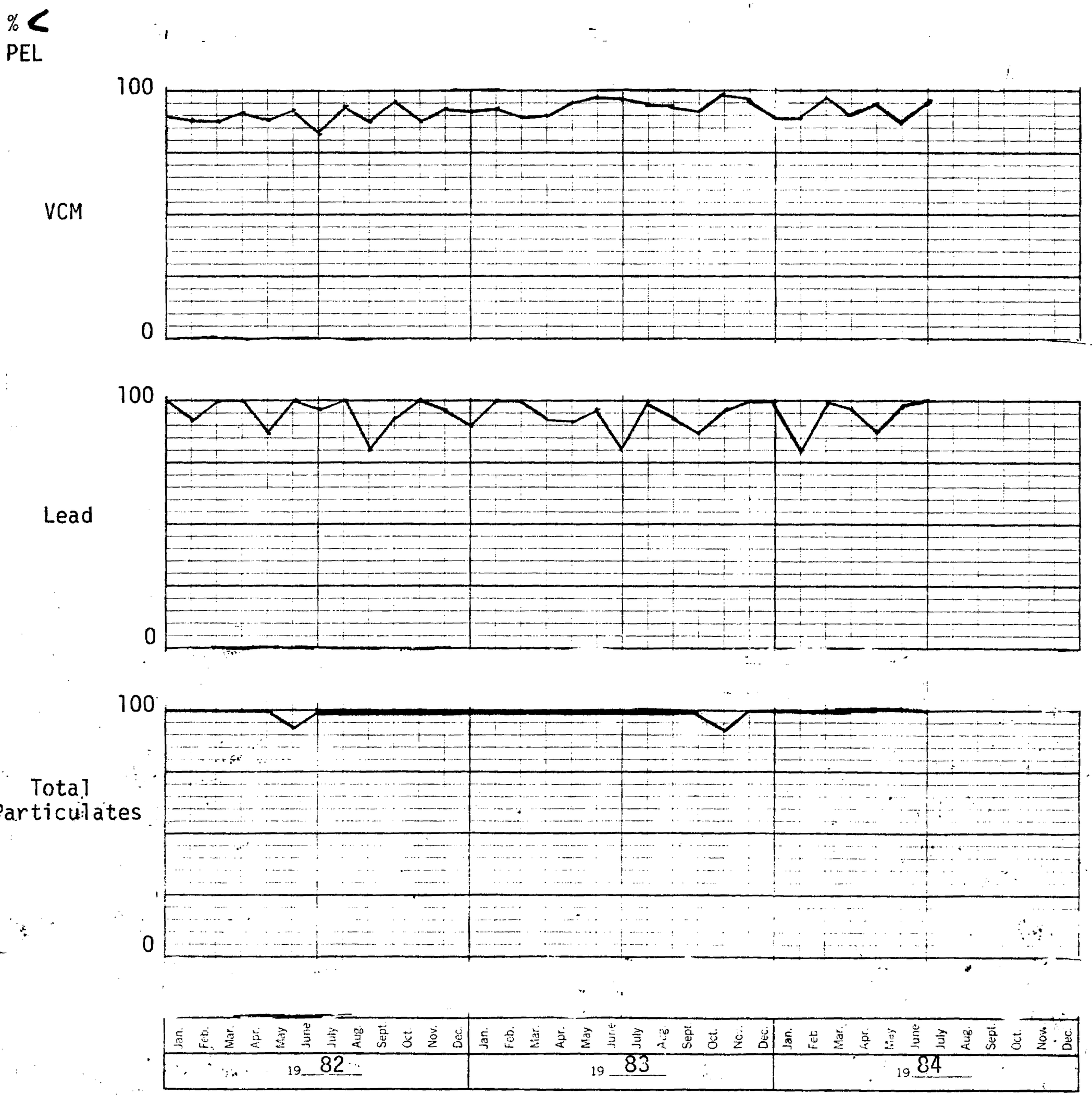
ABERDEEN CHEMICAL PLANT

CHEMICAL DOSIMETRY TRENDS



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JVU A

ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT

Month of: May

Date of Report: June 19, 1984

1. Routine Chemical Dosimetry

All Sample Results:

	< PEL		> PEL Overexposures	
	No.	%	No.	%
Chemical				
VCM	81	88	11	12
Lead	39	97.5	1	2.5
Total Particulates	4	100	0	0

Overexposures

Job Class	Exposure	Source
Chief Operator	16.0** ppm, VCM	Employee overexposed while disconnecting and unplugging a lip seal line on D-300 reactor seal.
Reactor Operator	1.8* ppm, VCM	Employee overexposed while changing VCM filter pack filters.
Reactor Operator	6.0** ppm, VCM	Employee performed his regular job of reactor operator. No specific cause of his over-exposure has been identified.
Reactor Operator	3.7** ppm, VCM	The employee did not perform his regular job of reactor operator. Instead, he was assigned to the tasks of painting handrails at the east incinerator and assisting electronics with small breaker labeling in the V-11 dryer area. No specific cause for his over-exposure has been identified.

Overexposures - Continued

Job Class	Exposure	Source
Dryer Utility	10.7* ppm, VCM	Employee overexposed while monitoring blend tank levels in V-10 during pond resin reclaim.
Yard Operator	2.5* ppm, VCM	Employee overexposed while assisting two general mechanics who replaced two Corken compressors at the VCM tank farm.
General Mechanic	2.5* ppm, VCM	Employee overexposed while repairing a Corken compressor at the VCM tank farm.
General Mechanic	2.2* ppm, VCM	Employee overexposed while blanking out 904 VCM recovery compressor.
General Mechanic	1.3** ppm, VCM	Employee overexposed while changing a seal on D-300.
Maintenance Supervisor	1.5** ppm, VCM	The employee spent approximately five minutes working near the new vinyl unit dump Sweco and approximately two minutes near the old vinyl PVC tank. The specific cause of his over-exposure has not been identified.
Maintenance Superintendent	1.4** ppm, VCM	Employee performed his regular job of maintenance superintendent, which took him to all parts of the plant throughout the work period. No specific cause for his overexposure has been identified.
Color Weigh Compounder	118.9* microgram Lead/m^3	Employee performed his regular job of color weighup, handling Halbase 100EP and Cyastab 988. No specific cause of his over-exposure has been identified.

* Respiratory protection was worn.

** Respiratory protection was not worn.

I. H. MO. REPORT ITEMS - MAY

VCM Area Sampling

A second set of four VCM area samples were taken in the bio-disc water treatment area, using REAL "Minimonitors". Wind velocity ranged from 0 to 5 miles per hour, direction being from north to south. Sampling time was eight hours.

This set of sample results agrees with the one in April, both demonstrating the effectiveness of the recently installed ventilation exhaust blowers in reducing VCM levels. Similar measurements taken during 1983 showed results averaging 19.9 ppm and ranging from 0.6 to 87.9 ppm, VCM.

Sample Location	Result - ppm, VCM	
	1st Set (April, 1984)	2nd Set (May, 1984)
Just north of middle bio-disc hut	0.2	0.1
West side of middle bio-disc hut	0.1	0.2
Just south of middle bio-disc hut	0.2	0.1
West side of east bio-disc hut	0.1	0.1

Area Ventilation Checks

The second quarter check of lab and compound ventilation hood velocities and flow rates was completed. The results were reported using a new format, which shows the results of the previous check.

Respiratory Protection

Plant Breathing Air System

Several repairs of the breathing air system were made, including replacement of sections of split pipe and faulty pressure regulators. The system is now operating correctly.

VCM Cannister Gas Masks

Removal of VCM cannister gas masks from plant service was completed.

Noise

The report on the plant noise survey conducted on April 10-11, 1984, by the Medical Department was received from them during May. The annual Noise Control Report and Plan was written, using the results from the Medical Department survey, and submitted for review.

GMD Systems, Inc. Passive Monitor

The second phase of the evaluation of the passive, VCM monitor marketed by GMD Systems, Inc. was completed. The results of the lab-based reproducibility studies will be reported by D. S. Cox, Manufacturing Chemist. Changeover from use of the REAL "Minimonitor" to that of the GMD device is anticipated, pending the reported results.

Equipment Calibration

The second quarter calibration of the precision rotameter used to measure Bendix BDX 44 air pump flowrates was completed using a large "bubble tube" as a primary standard. No significant drift was seen.

Material Safety Data Sheets

MSDS were reviewed by the Vinyl Department and the Maintenance Department. Three copies of each MSDS that pertain to the Vinyl Department will be issued to the Vinyl Operations Supervisor. The Maintenance Department will be issued a copy of nine MSDS to update their book.

Ginny Belk, R.N.

Ginny Belk, R.N.
Plant Nurse

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cc: JF, CRM, DWH, PJK, LPS, WFH, CRS, RAF, RAM, AHS, JVU
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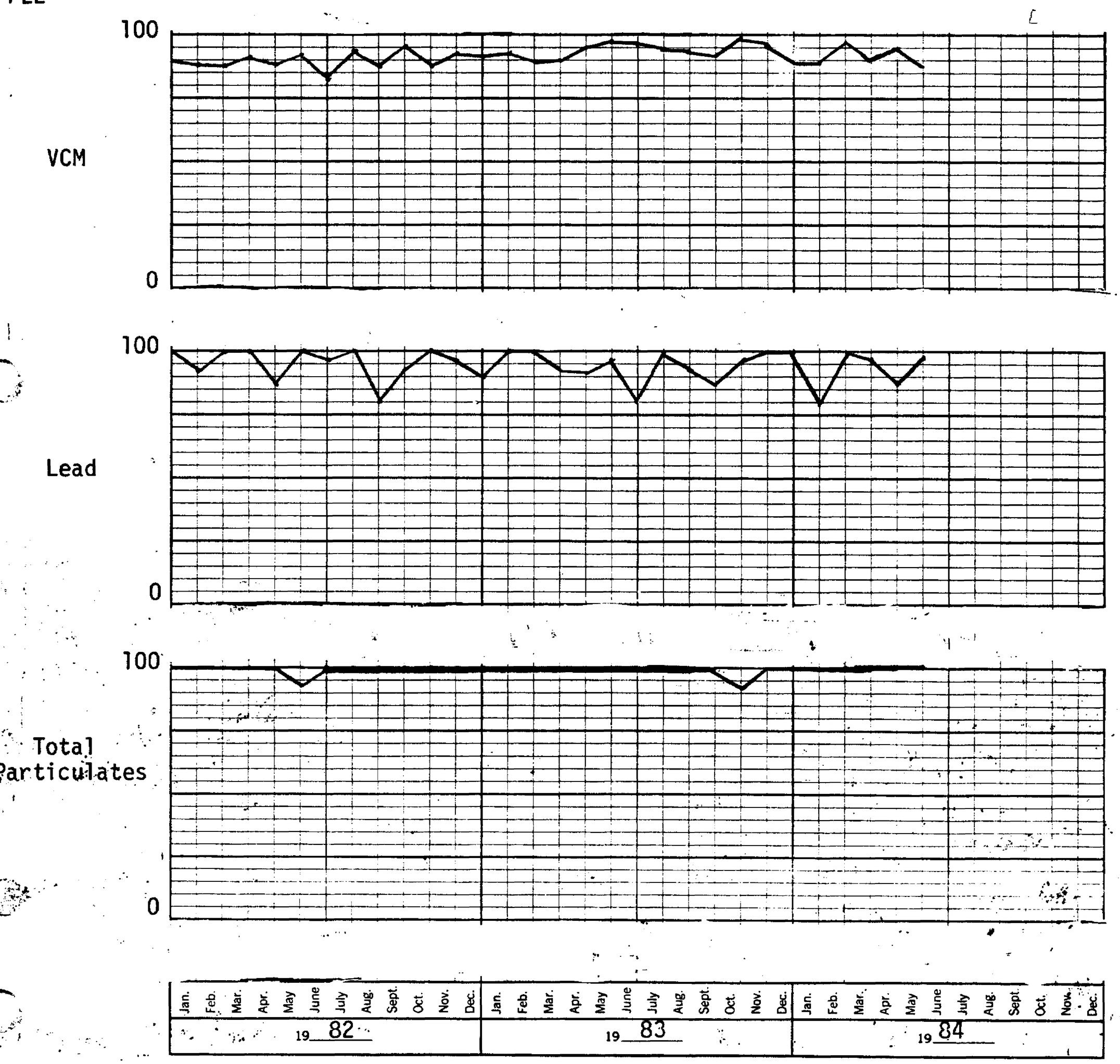
ABERDEEN CHEMICAL PLANT

CHEMICAL DOSIMETRY TRENDS



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JVU A

ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT

Month of: April

Date of Report: 5/9/84

1. ROUTINE CHEMICAL DOSIMETRY

All Sample Results:

	< PEL		> PEL (OVEREXPOSURES)	
	No.	%	No.	%
Chemical				
VCM	101	94.4	6	5.6
Lead	8	88.9	1	11.1
Total Particulates	5	100.0	0	0.0

OVEREXPOSURES

Job Class	Exposure	Source
General Mechanic	5.4*ppm, VCM	Employee overexposed while changing safety discs on D-400 reactor.
General Mechanic	2.4* ppm, VCM	Employee overexposed while changing a sightglass at the horizontal VCM storage tanks in the VCM tank farm.
General Mechanic	2.2* ppm, VCM	Employee overexposed while cleaning a sightglass at the horizontal VCM storage tanks in the VCM tank farm.
Instrument Technician	9.3** ppm, VCM	Employee overexposed while repairing the batch water stripper tubing.
Rx Operator	1.4* ppm, VCM	Employee overexposed while checking VCM leaks in the old unit.
Rx Operator	145.6* ppm, VCM	Employee overexposed while changing VCM filter pack filters.
Line Compounder	39.8* micrograms Lead/m^3	Employee overexposed while charging Halbase 100EP on compound line III.

* Respiratory protection was worn.
** Respiratory protection was not worn.

VCM AREA SAMPLING

Four VCM area samples were taken in the biodisc water treatment area, using REAL minimonitors. Wind velocity ranged from 0 to 5 miles per hour, direction being from west to east. Sampling time was seven hours and fifteen minutes.

The samples were taken to measure the effectiveness of recently installed ventilation exhaust blowers in reducing area VCM levels. Similar measurements taken during 1983 showed results averaging 19.9 ppm and ranging from 0.6 to 87.9 ppm, VCM. The evident reduction in VCM levels will be checked again during May.

Sample Location	Result ppm, VCM
Just north of middle biodisc hut	0.2
West side of middle biodisc hut	0.1
Just south of middle biodisc hut	0.2
West side of east biodisc hut	0.1

PLANT NOISE SURVEY

Pat McCoombs and Bill Richards of the Medical Department conducted an extensive plant noise survey on April 10-11, 1984. The work included property line noise measurements, noise level "contouring" within the plant, and noise dosimetry. Their report is expected to be issued during May.

RESPIRATORY PROTECTION

Scott Sling Paks

The relatively short waist straps provided with the five, recently received Scott sling paks were replaced with longer ones made from materials provided by Scott Aviation.

Training of vinyl shift supervisors on bottle changeout procedures for the sling paks was completed.

VCM Cannister Gas Masks

All VCM cannister gas masks were removed from plant service except those located in the Vinyl Department's area.

Ginny Belk, R.N.
Plant Nurse

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cc: JF, CRM, PEM, PJK, LPS, WFH, CRS, RAF, RAM, AHS, JVU
Tom Grumbles - Houston
J. R. Drumwright, M.D. - Ponca City

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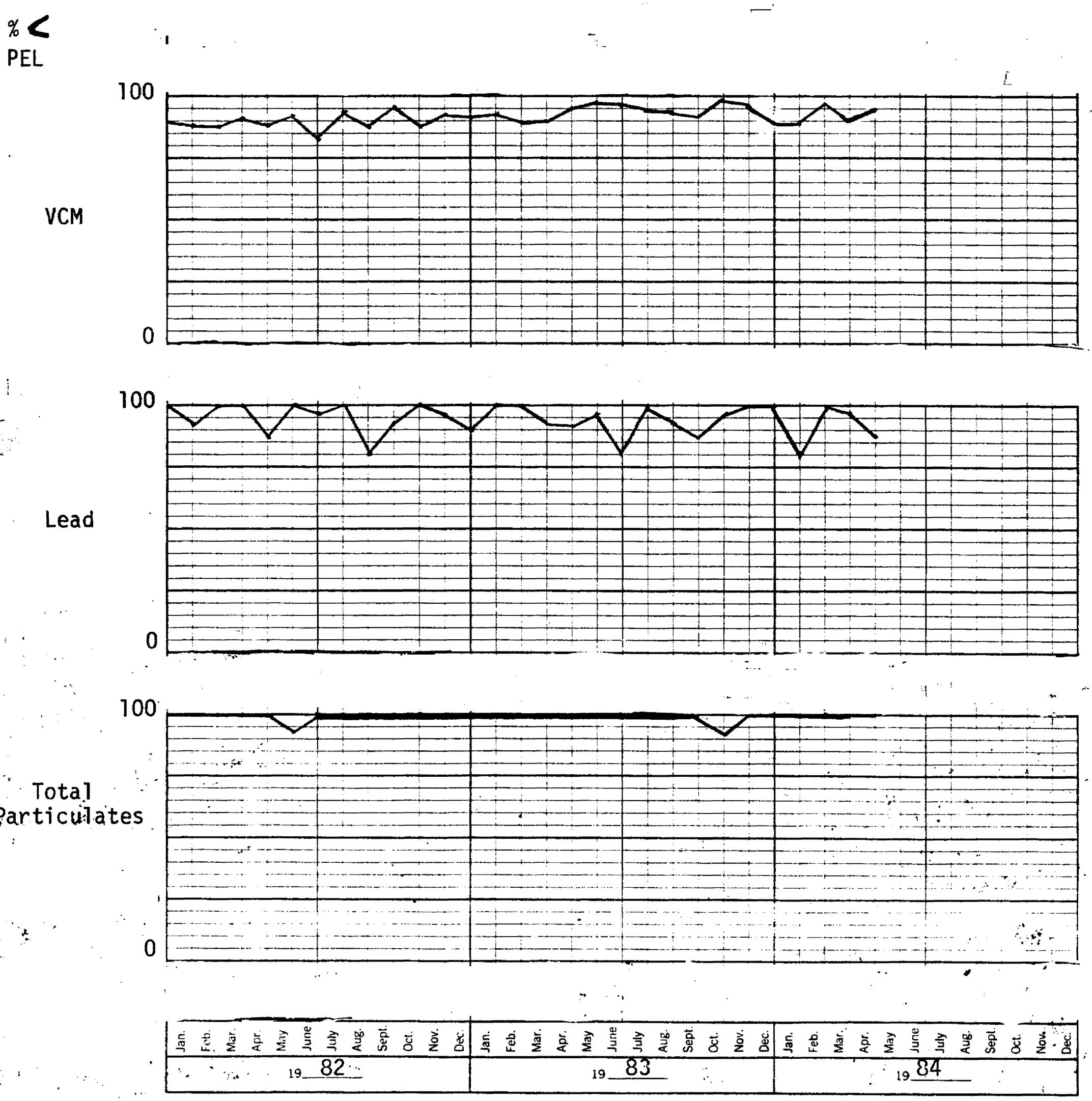
ABERDEEN CHEMICAL PLANT

CHEMICAL DOSIMETRY TRENDS



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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

Month of: March, 1984

Date Of Report: April 12, 1984

cc: JF, CRM, PEM, PJK, LPS, WFH, CRS, RAF, RAM, AHS
Tom Grumbles - Houston
J. R. Drumwright, M.D. - Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL		> PEL (OVEREXPOSURES)	
	No.	%	No.	%
VCM	79	91.9	7	8.1
Lead	21	95.5	1	4.5
Total Particulates	24	100.0	0	0.0

OVEREXPOSURES

Job Class	Exposure	Source
Chief Operator	454* ppm, VCM	Employee overexposed while helping control an emergency VCM release at the VCM tank farm.
Reactor Operator	3.7** ppm, VCM	Employee performed routine duties of reactor operator in the new vinyl unit. No specific cause has been identified.
Reactor Operator	3.8** ppm, VCM	Employee performed routine work of reactor operator. No specific cause has been found.
General Mechanic	1.3* ppm, VCM	Employee overexposed while changing out a Corken compressor.

VAB.0001040215

OVEREXPOSURES - Continued

Job Class	Exposure	Source
General Mechanic	1.5** ppm, VCM	Employee overexposed while tightening a leaking condenser lid on D-600 reactor.
General Mechanic	1.7** ppm, VCM	Employee overexposed while repairing the dryer line #2 centrifuge while pond resin was being reclaimed on dryer Line I.
General Mechanic	14.8** ppm, VCM	Employee overexposed while changing 742 reactor slow vent line.
Line Compounder	87.6* micrograms Lead/m^3	Employee overexposed while charging blenders on Compound Line I.

* Respiratory protection was worn.

** Respiratory protection was not worn.

VCM Area Sampling

Three VCM area samples were taken on the roof of the V-11 dryer building during roof repair on 3/16/84. The samples were taken using REAL minimonitors. Wind velocity ranged from 0 to 5 miles per hour, direction being from northwest to southeast:

Sample Location	Sample Time (Hrs.-Min.)	Result ppm, VCM	Comments
On safety railing east of 655 blend tank	7-10	0.4	Coarse 5385 resin in 655
On Safety railing east of and between 653 and 651 blend tanks	7-8	2.1	5305 resin in 651 and 653
On safety railing north of 650 blend tank	7-6	0.7	5305 resin in 650

Area Ventilation Checks

The second quarter check of lab and compound ventilation hood velocities and flowrates was completed. No serious deficiencies were discovered.

Noise

Final arrangements for a plant noise survey to be conducted by the Medical Department on April 10-12, 1984 were made.

Total Particulates Analysis

A five-place analytical balance, suitable for performing total particulates analyses, was purchased and received by the laboratory. Plans are to do all such analysis at Aberdeen beginning in April, 1984.

Equipment Calibration

The second quarter calibration of the precision rotameter used to measure Bendix BDX 44 air pump flowrates was completed using a large "bubble tube" as a primary standard. No significant drift was seen.

Program Plans

Both the Respirator Program and the Work Environment Hazard Control Plan were updated and approved.

Ginny Belk, R.N.

Ginny Belk, R.N.
Plant Nurse

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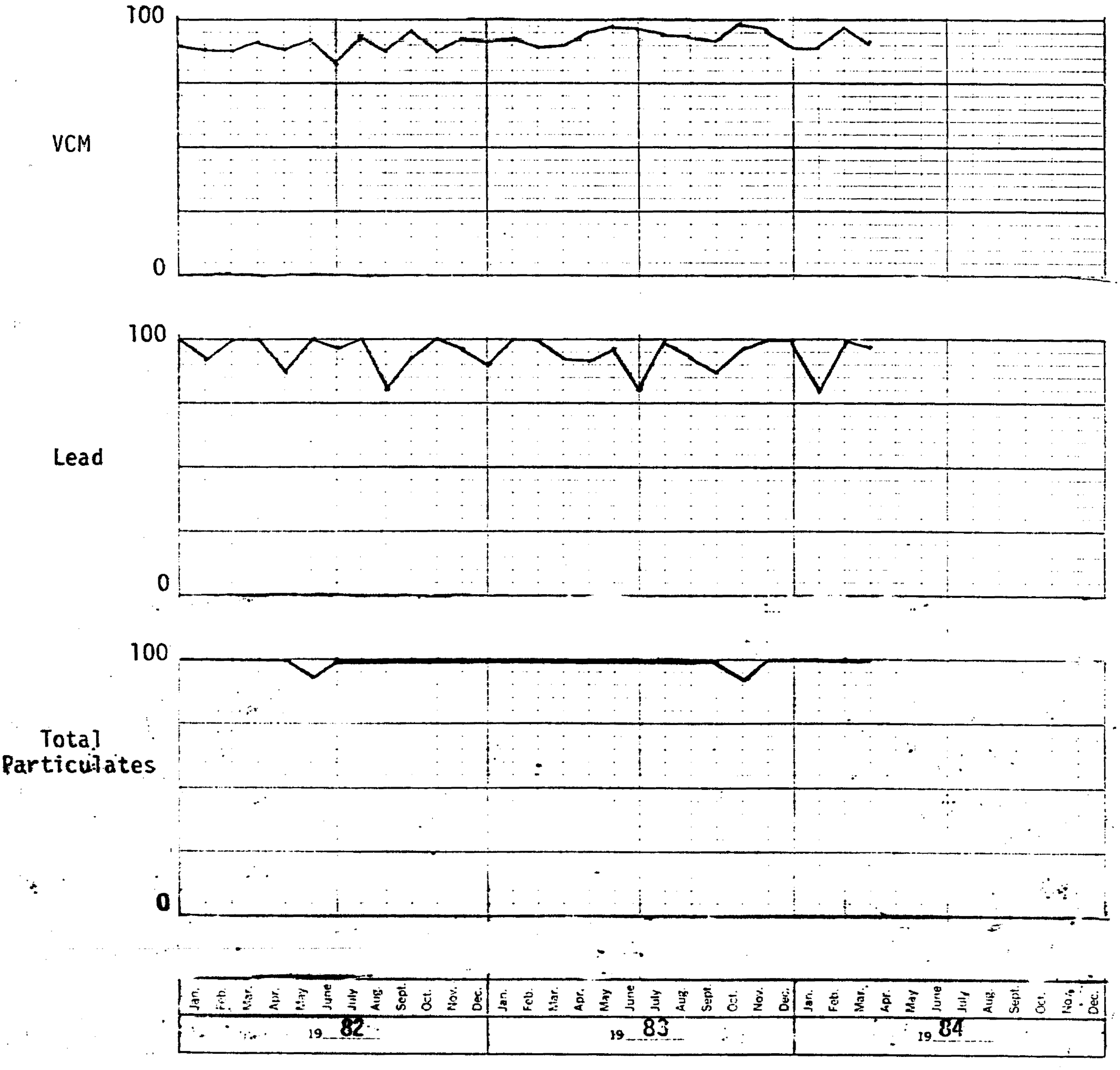
ABERDEEN CHEMICAL PLANT

CHEMICAL DOSIMETRY TRENDS



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ABERDEEN CHEMICAL PLANT

INDUSTRIAL HYGIENE MONTHLY REPORT

Month of: February

Date of Report: April 3, 1984

1. ROUTINE ~~CHEMICAL~~ DOSIMETRY

All Sample Results:

Chemical	< PEL		> PEL (OVEREXPOSURE)	
	No.	%	No.	%
VCM	25	96.2	1	3.8
Lead	32	97.0	1	3.0
Total Particulates	12	100.0	0	0.0

Overexposures

Job Class	Exposure	Source
Line Compounder	61.1* Micrograms Lead/m^3	Employee overexposed while charging Line III blenders. No specific cause has been identified.
Chief Operator	29.1* ppm, VCM	Employee overexposed while helping change VCM filter pack filters.

*Respiratory protection worn.

2. NOISE CONTROL

Resin deboxing area noise was reduced during February by insulating the cone at the bottom of the Sweco screener feed hopper. Noise level measurements taken before and after the insulation, using a General Radio Model 1565-B sound level meter, were :

Location	Noise Level, dBA	
	Before Insulation	After Insulation
1. 2 ft. from cone, on mezzanine	110	98-103
2. 16 ft. from cone, at ground level	95	92
3. Main traffic isle, at south door*	93	89

*84 dBA with hopper vibrator "off".

3. GMD SYSTEMS, INC. PASSIVE MONITOR

The lab-based familiarization study of the passive, VCM monitor marketed by GMD Systems, Inc. was completed. The second phase of the evaluation, involving reproducibility studies, was begun.

Ginny Bolk, R.N.
Ginny Bolk, R.N.
Plant Nurse

cc: JF, CRM, PEM, PJK, LPS, WFH, CRS, RAF, RAM, AHS
Tom Grumbles - Houston
J. R. Drumwright, M.D. - Ponca City

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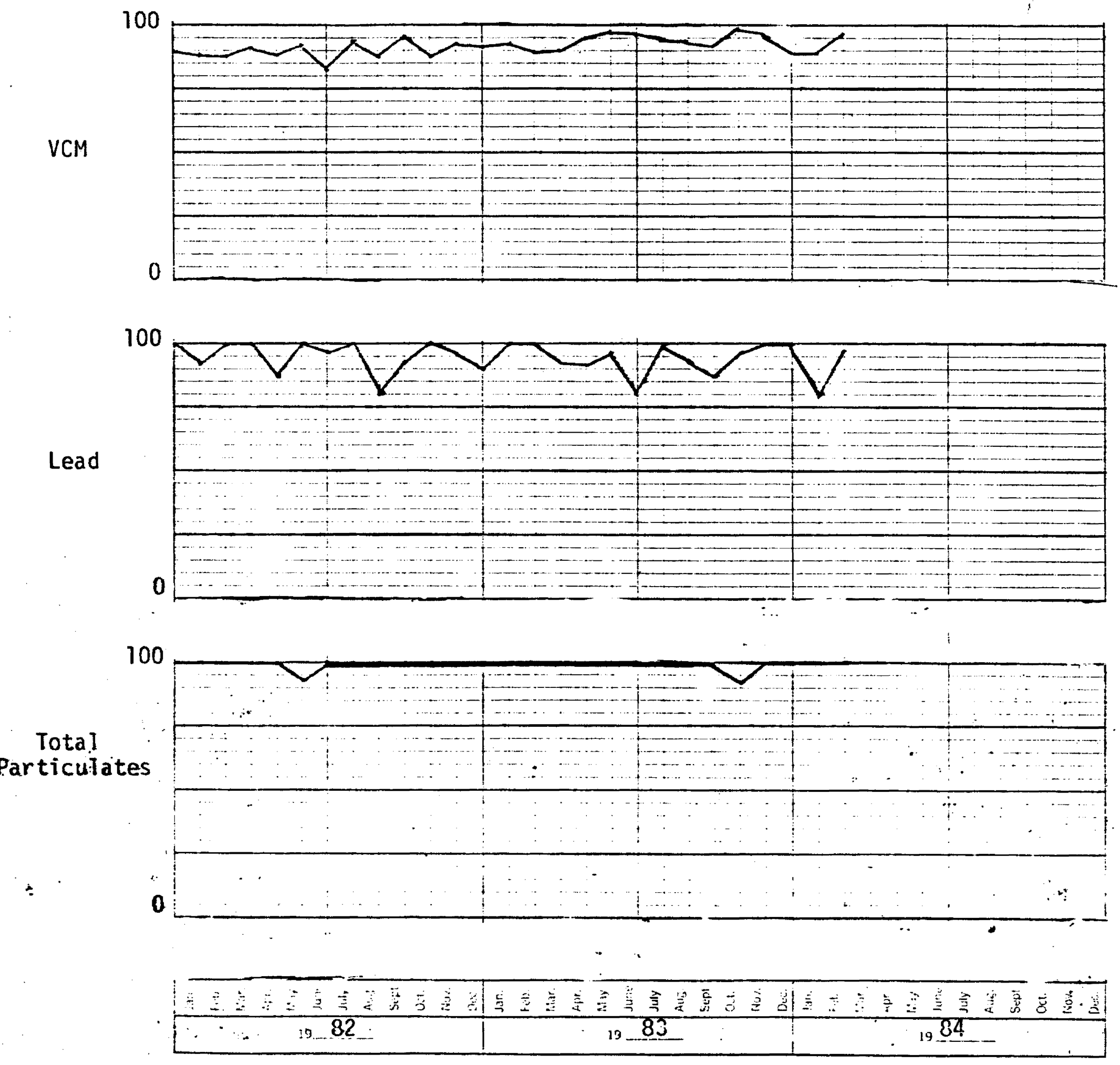
ABERDEEN CHEMICAL PLANT

CHEMICAL DOSIMETRY TRENDS



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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

Month of: January, 1984

Date Of Report: February 16, 1984

cc: JF, CRM, PEM, PJK, LPS, WFH, CRS, RAF, RAM, AHS
Tom Grumbles - Houston
J. R. Drumwright, M.D. - Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL No.	< PEL %	> PEL (OVEREXPOSURES) No.	> PEL (OVEREXPOSURES) %
VCM	86	89.6	10	10.4
Lead	4	80.0	1	20.0
Total Particulates	4	100.0	0	0.0

OVEREXPOSURES

Job Class	Exposure	Source
Color Weigh Compounder	95.2*, Micrograms Lead/m^3	Employee did routine job of color weighup, including Halbase 100EP and Cyastab 988.
Reactor Operator	1.2* ppm, VCM	Employee overexposed while changing VCM filter pack filters in the old unit.
Reactor Operator	1.4* ppm, VCM	Employee overexposed while conducting a VCM leak check in the old unit.
Vinyl Lead Operator	1.5 ppm, VCM	Employee worked inside the vinyl control room during a period in which the control room air supply system was inoperative due to failure of a blower during cold weather.

VAB.0001040222

OVEREXPOSURES - Continued

Job Class	Exposure	Source
Vinyl Shift Supervisor	2.4* ppm, VCM	Employee overexposed while checking VCM filter packs in both vinyl units.
General Mechanic	1.6 ppm, VCM	Employee overexposed while performing several VCM leak repairs.
General Mechanic	1.6 ppm, VCM	Employee overexposed while insulating piping at grade level on the west side of D-400, D-500, and D-600 reactors. The specific source of VCM has not been identified.
Electrician	2.0 ppm, VCM	Employee repaired a dry blend boxing hopper dust collector and a roll-up, traffic door just north of the Compound Shift Supervisor's office. The source of VCM has not been identified.
General Mechanic	2.4* ppm, VCM	Employee overexposed while removing a blank from the end of a VCM line next to D-300 reactor to check for pluggage.
General Mechanic	3.3 ppm, VCM	Employee repaired the steam tracing on an alcohol transfer line from the P-1 building to the plasticizer tank farm. No specific source of VCM has been identified.
General Mechanic	21.3* ppm, VCM	Employee overexposed while repairing a VCM recovery compressor leak.

*Respiratory Protection Worn.

Gerald Uptain

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