

To: T. H. Huffman

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From: D. C. Skokna
Date: March 26, 1990

WILLIAM L. McCLAIN

Subject: ABERDEEN MONTHLY PROGRESS REPORT
FEBRUARY, 1990

Interoffice
Communication

VISTA

Safety

There were no injuries reported during February. At month's end, the Aberdeen plant's employees have worked 3891 days (5,168,371 manhours) since the last lost time injury.

<u>FY 1990 Key Statistical Information</u>	<u>February</u>	<u>Y.T.D.</u>
PVC Production, MM Lbs.	36.5	179.5
Reactor Stream Factor, %	92.5	84.8
Resin Quality, % Prime	95.3	96.5
VCM Efficiency, Lbs./Lb.	1.0055	1.0007
Flexible Compound Production, MM Lbs.	6.1	29.8
Flexible Compound Quality, % Prime	98.1	98.0
Rigid Compound Production, MM Lbs.	4.3	21.4
Rigid Compound Quality, % Prime	99.4	99.4
Plasticizer Production, MM Lbs.	1.3	6.9
Plasticizer Quality, % Prime	91.0	89.8
Energy Use, (EUI, %)	< 17.0>	< 13.4>
Fixed Cost Variance, \$M	121.8	141.2
Variable Cost Efficiency Variance, \$M	< 24.2>	243.8

Capacity Utilization Factors

Resin	105.6	95.4
Flexible Compound	69.0	76.1
Rigid Compound	93.2	99.4
Plasticizer	73.3	77.0

Operations

Initial testing of a proprietary clean wall agent in the resin unit was completed. Results are promising.

Demand for flexible compound continued strong in February and production schedules were tight all month. Line I ran forty-eight hours on PLENEX polymers trials. On Line V, a test run was done to optimize screw configuration for rigid compound production.

CCR 000006260

T. H. Huffman

3/26/90

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The dry blend unit set a new single day record on 2/1 producing 378.4M pounds; the previous record was 356.6M pounds. Dry blend orders continued to be strong during the month.

A 10M-pound sample of foamed sheet dry blend was produced for Vycom. During the run, an experimental design (varying batch size and drop temperature) was done.

Costs

Variable costs were above budget, primarily due to product mix in compound and above budget raw material usage in the plasticizer unit.

Fixed costs were below budget due primarily to good results in the MM&C category and less than budget expenditures in some of the miscellaneous items.

OMP

1. Ninety-five percent of the plant's natural teams met during February.
2. The Old Module Recovery Team made its management presentation. They recommended revisions that resolve some safety concerns experienced maintaining the compressors and vacuum pumps in this system. A capital request (\$60M) will be submitted in the third quarter to implement these recommendations. This team found very cost-effective ways to correct the safety problems. Previous estimates to correct the same problems were about \$500M.
3. El Paso PVC (a division of Group Dekko) visited the plant on 2/9 to become familiar with our plant. They purchase 5415.
4. An experimental design was done in the dry blend unit to evaluate the effect of batch size and drop temperature on blowing agent dispersion in foamed sheet dry blend (for Vycom).

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OMP - continued

5. On Line III, an experimental design was done to determine how temperature and shear affect fusion delay.



Doug Skokna
Plant Superintendent

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CCR 000006263

SAFETY - B. L. Trego, J. V. Uptain

	<u>February</u>	<u>Fiscal</u> <u>Y.T.D. 1990</u>	<u>Fiscal</u> <u>Y.T.D. 1989</u>
First Aid	0	6	6
OSHA Recordable	<u>0</u>	<u>3</u>	<u>2</u>
Total Injuries	0	9	8
Number of Restricted Workday Cases	0	2	1
Number of Lost Workday Cases	0	0	0

Injuries by Department

Vinyl Operations	0	0	0
Compound Operations	0	2	2
Maintenance	0	6	6
Laboratory	0	0	0
Receiving/Warehouse	0	0	0
Office	<u>0</u>	<u>1</u>	<u>0</u>
Totals	0	9	8

Injuries by Type

Cuts and Abrasions	0	2	1
Eye Injuries	0	1	0
Burns	0	2	2
Bruises	0	1	2
Strains/Sprains	0	0	2
Stings	0	1	0
Other	<u>0</u>	<u>2</u>	<u>1</u>
Totals	0	9	8

Non-Occupational Injuries

Lost Workday Cases	0	3	2
Days Lost	0	84	35

Safety Record

Last lost time injury - 7/5/79
Days since - 3891
Employee hours since - 5,168,371

On February 28, 1990, the employees of the Aberdeen plant completed 3891 days with no lost time injury.

The main topic for plant safety meetings during the month was a review of the plant's new safety handbook. There was nearly 100% attendance to these meetings.

CCR 000006264)

SAFETY - Continued

Routine dosimetry results for the month were:

<u>Chemical</u>	<u>< PEL</u>		<u>> PEL</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
VCM	69	100.0	0	0.0
Lead	11	100.0	0	0.0
Total Particulates	5	100.0	0	0.0

Monthly Injury Summary

There were no injuries reported.

CCR 000006265

QUALITY MANAGEMENT PROCESS - M. R. Kane

Ninety-five percent of the plant's natural teams met in February, some for the first time. The facilitator team is working with the teams to teach them team management techniques.

The departmental support scorecards were finalized so that each employee knows how their contribution affects the plant scorecard. Also, the Q-Scorecard was finalized and communicated to the plant.

One customer visit occurred during the month. ElPaso PVC (a subsidiary of Group Dekko) visited to tour the plant and learn a little more about PVC production.

CCR 000006266

COST VARIANCES - D. C. Skokna

Variable Costs

<u>Product</u>	<u>February, 1990 Variance, \$M</u>		
	<u>Efficiency</u>	<u>Price</u>	<u>Total</u>
PVC	<\$11.7>	\$834.0	\$822.3
Flexible Compound	90.5	175.7	266.2
Rigid Compound	<81.9>	215.7	133.8
Plasticizer	<21.1>	23.3	2.2
	<\$24.2>	\$1248.7	\$1224.5

PVC - Efficiencies were essentially at budget.

Flexible Compound - Product mix (\$76.3M favorable), raw material use (\$15.2M favorable), and lower than budget off-grade (\$11.0M favorable) were the contributors to the overall favorable variance.

Rigid Compound - Product mix caused essentially all of the month's variance.

Plasticizer - Raw material use was above budget.

Price Variances

	<u>\$M</u>
- VCM	\$816.7
- Resin to Rigid Compound	203.6
- Resin to Flexible Compound	157.9
- Alfol [®] 610	16.4
- Electricity	11.7
- TiO ₂	10.1
- Other Price Variances	32.3
Total	\$1248.7

Fixed Cost Variances

	<u>\$M</u>
- Payroll and Benefits	\$ 6.2
- MM&C	51.7
- Miscellaneous	59.0
- TI&D	5.6
- Clearances	< 0.7>
Total	\$121.8

Payroll and Benefits - These were essentially at budget.

M. M. & C. - This category was favorable due to low activity levels.

CCR 000006267

COST VARIANCES - Continued

Miscellaneous: Major variances in this category were:

Unclassified: \$10.7M favorable - Physical exams were budgeted in the second quarter but will occur in March when the charges will clear.

Contract, Operating: \$12.2M favorable. Strike preparation costs of \$30M were budgeted in the second quarter. Charges have not cleared (should clear in March or April).

Processing Supplies: \$10.1M favorable.

Switching Costs: \$13.9M favorable. This month's invoice was late.

CCR 000006268

VINYL - J. D. Olson, K. W. Birck

Safety

The Vinyl Department did not have any first aid or OSHA recordable injuries during the month of February.

The monthly safety meeting topic for the month was the new safety manual.

General

1. Initial clean wall testing was completed during February. Results continue to look promising as reactor walls repeatedly and consistently coated with clean wall agent prior to charge have remained clean. Next month a new temporary test clean wall injection system will be used. This new system will be designed to provide better clean wall application.
2. Startup of the V-11 natural gas detectors was completed in February. This plant safety feature shuts down the dryer direct fired burners whenever a high level of natural gas is detected in the dryer building.
3. The resin raw materials in the 744 account were valued at \$349.1M.

	<u>February</u>	<u>YTD</u>
- Production, MM Lbs.	36.6	179.6
- Daily Rate, M Lbs./C.D.	1307.3	1189.5
- Capacity Utilization Factor, %	107.2	97.6
- Total Reactor Charges	854.0	4203.0
- Charges/C.D.	30.5	27.8
- Reactor Stream Factor, %	92.5	84.8
- Rotary Dryer Stream Factor (#4-#8), %	85.7	73.5
- Fluid Bed Dryer Stream Factor, %	96.7	88.2
- Resin Quality, % Prime	95.3	96.5

Reactor Downtime

Hours

- | | |
|--|-------|
| - Operational downtime (recovery scheduling conflicts, rinsing chem wash tanks, New Module rinse/charge water conflicts, no place to dump, O-ring leaks, waiting on Q.C. data before charging, and inclement weather). | 229.0 |
| - Maintenance downtime (hydroblast reactors and drill condensers D700, replaced condenser base gasket on D741, drilled 741 condenser, replaced agitator seal on D400, repaired reactor jacket on D400, replaced reactor Lanape manway on D300 and miscellaneous instrument and valve repairs). | 275.0 |

CCR 000006269

VINYL - Continued

<u>Dryer Downtime</u>	<u>% of Total Downtime</u>
- Reactor limited production.	66.7
- Operational downtime (centrifuge plugs, check for dust collector leaking, clean dryers, activator transfer problems, and flameouts).	16.5
- Maintenance downtime (centrifuge repairs, replace north fluid bed centrifuge, shear pins, exhauster maintenance, hydroblast centrate line, sparge pipe replacement and Bird boot repairs).	16.8

Key Maintenance Work - J. B. Autrey, J. B. Hegwood

- Reactor 400 was shut down during the month for repairs to the water jacket. A crack developed in the weld between the water jacket and the reactor vessel. Also during this time, the seal was changed out on the reactor because of an excessive oil leak. The seal was in service for nine months.
- The north fluid bed Bird centrifuge was changed out during the month because of a minor vibration problem. The vibration was caused by a calcium carbonate buildup. The Bird was replaced with a spare. The Bird that was removed will be rebuilt and used as a spare.
- Reactor 741 was shut down during the month because of a leaking gasket on the condenser base. The gasket was replaced with a Flexitallic spiral wound gasket and the condenser was drilled because of cooling control problems.
- The "B" recovery compressor was changed out during the month due to decreased performance. It was replaced with a spare compressor.
- The #5 dust collector conveyor screw was changed out with a spare during the month. The screw shafts have been breaking because of an excessive torsional stress. Several options are being considered at this time to alleviate the problem.
- The #8 Bird centrifuge was taken out of service during the month, rebuilt and put back in service.
- Reactor 700 was shut down during the month for condenser drilling and hydroblasting as part of the contamination control program.
- Reactor 742 was shut down for condenser drilling during the month because of cooling control problems.

VINYL - Continued

Key Maintenance Work - continued

- The north chem wash pump motor was changed out with a spare during the month because of bad bearings in the motor.
- The vinyl control room UPS unit was shut down for repairs on its systems control board and battery backup system. The systems control board was replaced along with three batteries.
- The old unit centrate exchanger was shut down for drilling and acid-cleaning because of an excessive calcium buildup.
- There were eight major valves changed out in the reactor area during the month.

CCR 000006271

COMPOUND - J. E. Nickerson, K. G. Akins

Safety

The Compound Department worked without injury in February. The new safety handbook was reviewed in the monthly safety meetings.

General

Demand for flexible compound continued strong in February. Production schedules remained tight throughout the month. Line I rates were reduced by 48 hours of PLENEX polymer production and fifty-four hours of roll mill maintenance. Line V was down for forty-eight hours during a test run to optimize screw configurations for production of rigid compounds. Work began on an experimental design on Line III to determine how temperature and shear affect fusion delay.

On February 1, the dry blend unit produced 378,370 pounds to set a new one-day production record. The previous record was 356,554 pounds set on January 6, 1990. As in January, the orders for rigid compound were heavy. A 10M pound sample of foamed sheet dry blend was produced for Vycom in February. An experimental design was conducted during this production to determine the effect of batch size and drop temperature on blowing agent dispersion. Samples of 80273G dry blend produced after the foamed sheet dry blend were sent to R&D to determine the extent, if any, of blowing agent contamination of subsequently produced materials.

Rates were slightly reduced in the plasticizer unit as two plasticizer reactor agitator assemblies were replaced. The final two replacements will be completed in March.

<u>Compound Production</u>	<u>Operating Days</u>	<u>Production (M Lbs.)</u>		
		<u>Month</u>	<u>Avg./Day</u>	<u>Fiscal Y.T.D.</u>
Line I	27	1733	64	9965
Line III	28	3425	122	16576
Line V	21	<u>900</u>	<u>43</u>	<u>3239</u>
Total		6058	229	29780
% Prime		98.1		98.0
Capacity Utilization Factor		.780		.764

Downtime

Hours

Line I

- Product Changes	81
- Mill Maintenance	54
- PLENEX Polymer Testing	48
- Miscellaneous Maintenance	19
- Dicer Problems & Maintenance	14

CCR 000006272

COMPOUND - Continued

Downtime - continued

	<u>Hours</u>
<u>Line III</u>	
- Product Changes	60
- Miscellaneous Maintenance	37
- Quality Problems and Control	9
- Mill Maintenance	9

Line V

- W-P Maintenance	52
- Rigid Compound Test Run	48
- Quality Problems & Control	44
- Weigh System Maintenance	42
- Product Changes	36
- Miscellaneous Maintenance	17

	<u>Operating</u>	<u>Production (M Lbs.)</u>		
	<u>Days</u>	<u>Month</u>	<u>Avg./Day</u>	<u>Fiscal Y.T.D.</u>
Rigid Compound	28	5481	196	22578
% Prime		99.4		99.4
Capacity Utilization Factor		.930		.754

<u>Downtime</u>	<u>Hours</u>
- Product Changes	82
- Quality Problems & Control	40
- Miscellaneous Maintenance	26

	<u>Operating</u>	<u>Production (M Lbs.)</u>		
	<u>Days</u>	<u>Month</u>	<u>Avg./Day</u>	<u>Fiscal Y.T.D.</u>
Plasticizer	28	1404	50	7704
% Prime		91.0		89.8
Capacity Utilization Factor		.679		.752

Key Maintenance Work - J. B. Autrey, J. B. Hegwood

- The Line V twin screw extruder was shut down during the month so that the lubrication system could be cleaned. The filters and oil tank were also cleaned.
- The Line I mill was shut down during the month for repairs to its gears. The gears were removed and flipped because of excessive wear on one side of the gear teeth. A new set of gears has been placed on order.

COMPOUND - Continued

Key Maintenance Work - continued

- The front rotary joint on the Line III mill was replaced during the month and repairs were made to the hydrotherm line also.
- The rotary joint on the Line I Banbury gate was replaced during the month.
- The middle cooling tower pump was taken out of service because of bad windings in the motor. The motor is being repaired and the pump will be put back in service as soon as possible.
- The temperature control loop on R-2 plasticizer reactor was repaired during the month.

CCR 000006274

UTILITIES - J. B. Autrey, J. B. Hegwood

The #5 water well was put in service on 2/19/90. The calcium carbonate levels in this well are significantly less than that of the other wells.

Pond aerators #3, #4 and #8 were shut down for repairs during the month. The motors were replaced in aerators #4 and #8. Number three had a bad ground wire that was repaired.

CCR 000006275

ENGINEERING - R. E. Polk, S. C. Hillman, M. R. Kane

PROJECTS IN DEVELOPMENT - GENERAL

5305 Decalcified Water Test

The test run for removing calcium in 5305 charge and rinse water will begin the week of March 12. The test will involve diverting charge and rinse water for 5305 made in 745 reactor through a water softening bed. Samples will be sent to BASF for calendaring evaluation. If BASF sees an improvement in graininess, a car will be offered to Klockner for evaluation.

EVC Clean Wall Technology

The closed reactor temporary addition system for 745 was completed March 7. The system is being tested. Results from the testing will be used to design a permanent addition system for all vinyl reactors.

TC Waste Water Compliance

A class "A" design is being prepared to provide instrumentation and equipment to improve the reliability of the batch water strippers. This will be needed to meet TC waste water limits.

Interaction Management

Engineering, department heads and supervisors attended Interaction Management seminars conducted at the Best Western.

Plasticizer BOD/COD Reduction

Baffling of the existing biodisc has been identified as a way to improve BOD/COD performance from the biodisc. A baffle will be installed between the second and third cell in mid-March, after which sampling will be increased to determine the amount of BOD/COD reduction that can be achieved.

Recruiting

Of the four offers made for permanent process engineers, three have declined.

CCR 000006276

ABERDEEN CHEMICAL PLANT
APPROVED CAPITAL PROJECTS

AFE NUMBER	PROJECT DESCRIPTION	STATUS
AB58	ALTERNATE NATURAL GAS PIPELINE	THE SYSTEM HAS BEEN STARTED UP AND IS OPERATIONAL. PUNCHLIST ITEMS ARE IN PROGRESS.
DB18	VINYL VALVE UPGRADE	INSTALLATION IS IN PROGRESS AND PLANNED FOR COMPLETION IN APRIL.
AS19	PLANT ELECTRICAL UPGRADE	CONSTRUCTION IS 95% COMPLETE AND IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR MARCH.
A649	VINYL CONTROL SYSTEM MODERNIZATION	ENGINEERING IS IN PROGRESS. CONTROL ROOM PRE-WORK ITEMS ARE SCHEDULED FOR COMPLETION IN MARCH.
A909	INERTS REMOVAL MODIFICATIONS	DESIGN IS IN PROGRESS WITH COMPLETION SCHEDULED FOR MARCH.
C919	NEW WATER WELL	CONSTRUCTION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS. COMPLETION IS PLANNED FOR MARCH.
DB19	PROPANE STORAGE AREA DELUGE SYSTEM	INSTALLATION WILL BE COMPLETED IN APRIL.
D629	COMPOUND REBLEND TRANSFER SYSTEM	INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS.
D719	LEAD HANDLING AND EXPOSURE REDUCTION	INSTALLATION IS IN PROGRESS WITH COMPLETION PLANNED FOR MAY.
D789	INERT GAS PURGING OF PA TANKS	INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS.
DB49	COMPOUND LINE 3 SEMI-BULK LEAD HANDLING	LONG LEAD ITEMS HAVE BEEN PLACED ON ORDER. PROJECT COMPLETION IS PLANNED FOR 7/1.
DB59	COMPOUND SILD BRIDGE BREAKING	LONG LEAD ITEMS HAVE BEEN PLACED ON ORDER. INSTALLATION IS PLANNED FOR COMPLETION IN JUNE.
F579	COMPOUND BOXING HOPPER MAGNETS	INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS.
F669	COMPOUND LINE 5 HEATED PLASTICIZER	ENGINEERING IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR MAY.
F699	LOW MOLECULAR WEIGHT RESIN EXPANSION	INSTALLATION IS IN PROGRESS WITH COMPLETION PLANNED FOR MAY.
F739	DRYER NO.8 CONTAMINATION REDUCTION	THE PROJECT WILL BE CLOSED TO FIELD CHARGES IN MARCH.
F779	DRYER NO.4 CONTAMINATION REDUCTION	A CHANGE ORDER HAS BEEN APPROVED FOR MODIFICATIONS TO #5 DRYER.
6569	DRYBLEND DIV. VALVE AND CHUTE REPLACEMENT	DESIGN IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR APRIL.
6659	NEW DRYER BAGHOUSES	RE-DESIGN OF THE BAGHOUSE SCREW FEEDERS IS IN PROGRESS.
6719	COMPOUND SEWER REVISIONS	INSTALLATION IS IN PROGRESS WITH COMPLETION IN MAY.
6759	WASTE OIL REDUCTION	INSTALLATION IS IN PROGRESS WITH COMPLETION PLANNED FOR APRIL.
6819	VCM SIGHT GLASS REPLACEMENT	DESIGN IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR APRIL.
6839	PLANT WATER RECYCLE	DESIGN IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR JUNE.
H679	PLASTICIZER REACTOR AGITATORS	INSTALLATION IS SCHEDULED FOR COMPLETION IN MARCH.
H729	TORQUE RHEOMETER REPLACEMENT	THE PROJECT WILL BE CLOSED TO FIELD CHARGES IN MARCH.
H769	PLANT DIVERTER VALVE REPLACEMENT	INSTALLATION IS COMPLETE EXCEPT FOR PUNCHLIST ITEMS.
H829	RECOVERY SYSTEM COMPRESSOR - SPARE	THE COMPRESSOR IS SCHEDULED FOR DELIVERY IN APRIL.
H879	ROOF UPGRADE	THE PROJECT WILL BE CLOSED TO FIELD CHARGES IN MARCH.
A540	REDUCED FLAME & SMOKE COMPOUND PROJECT	DESIGN IS IN PROGRESS TO PROVIDE COOLING WATER TO THE BAMBURY ROTORS.
H500	PLANT WATER SYSTEM	ENGINEERING IS IN PROGRESS. PROJECT COMPLETION IS PLANNED FOR MID-1991.
H510	WEST INCINERATOR REPLACEMENT	ENGINEERING IS IN PROGRESS. SPECS HAVE BEEN ISSUED TO T-THERMAL FOR REVIEW.
H520	MISCELLANEOUS CAPITAL PROJECTS < \$15M	ENGINEERING IS IN PROGRESS ON 23 PROJECTS.
L530	FURNITURE AND OFFICE EQUIPMENT	EQUIPMENT IS BEING QUOTED.

CCR 00006277

ENVIRONMENTAL - F. G. Jeanson

Water

All wastewater discharge parameters were met for the month of February.

Bioassay testing was also completed on centrate containing the new clean wall agent. Results were favorable.

Air

The new air permit for our plant will be reviewed by the Mississippi Department of Environmental Quality (MDEQ) Board on March 13. We should have a new air permit shortly after that date.

SARA

The Section 312 report was completed and issued to the State, the Local Emergency Planning Committee (LEPC), and the fire department.

The 1988 Section 313 report was sent to us by EPA to be proof-read. The report was proof-read and returned to EPA.

Waste

The RCRA Biennial Report was completed and issued to the MDEQ.

Waste shipments for the month included:

- One bulk load of separator oil to Systech in Demopolis, AL.
- One drum load of stabilizer spill to Technical Environmental System in LaPorte, TX.

Chemical Waste Management will stabilize all loads going to the Lake Charles facility at the Emelle, AL facility. All of our drum loads of waste can now go to Emelle to be stabilized. From there, they will be transferred to Lake Charles. There will be an additional charge for the transfer; however, the total cost will be less than what we currently pay for transportation.

Reports Completed

- Monthly NPDES
- EPA questionnaire on latitude/longitude of NPDES outfalls
- Vinyl Institute Environmental awards questionnaire

CCR 000006278

ENVIRONMENTAL - Continued

Superfund

A meeting was held with EPA (Region IV) to discuss the NUS Report and recommendations.

A meeting was also held with Conoco representatives to review the NUS Report and look over the sites.

A letter was completed with four tables summarizing the results listed in the NUS Report.

Miscellaneous

Joe Ledvina and I visited M&M Chemical, a waste oil blender, to qualify them as an option for recycle of burnable residuals.

I attended a seminar on the Third Third Land Ban conducted by Chemical Waste Management.

I took the Certified Hazardous Materials Manager's exam this month.

Bob Seymour and I attended a legislative reception in Jackson for the area representatives and senators, which was sponsored by the Aberdeen-South Monroe County Chamber of Commerce.

ENERGY CONSERVATION - D. A. Moore

February, 1990

Fiscal Y.T.D.

I. Energy Conservation Data⁽¹⁾

A. Unadjusted EUI	<16.8%>	< 13.1%>
B. Adjusted EUI	<17.0%>	< 13.4%>
C. BTU/Lb. Product	2888.0	2791.0
D. Total Energy Consumption MMM BTU	139.38	663.67

II. Plant Energy Conservation Program

A. Maintenance

There were thirty-five energy related items completed in February. Twenty-nine of these items were steam leak repairs. The remaining six were steam trap repairs.

III. Boiler Operation

<u>Boiler</u>	<u>Combustion Efficiency %</u>	
	<u>Feb., 90</u>	<u>Fiscal Y.T.D.</u>
No. 1	83.3%	83.44%
No. 2	83.1%	83.32%
No. 3	83.0%	83.02%

(1) Total energy usage is an estimate due to the plant electrical upgrade project being under construction.

CCR 000006280

HUMAN RESOURCE REPORT

FEBRUARY, 1990

Personnel - J. E. Beall

Employment

None

Promotions/Transfers

John D. Olson - Transferred from Lake Charles Chemical Plant, Operations Superintendent, to Operations Superintendent - Aberdeen.

Charles McDonald - Transferred from Senior Process Engineer - Aberdeen to Process Superintendent - Oklahoma City.

Dwain Lucas - Transferred from Lab Lead Technician to Lab "A" Technician (due to Mike Gray returning to Lab)

William Holcomb - Promoted from Storekeeper "B" to Storekeeper "A".

RETIREMENTS

None

TERMINATIONS/RESIGNATIONS

None

TO/FROM LEAVE OF ABSENCE

None

ABERDEEN, MISSISSIPPI

FEBRUARY, 1990
MONTHLY PERSONNEL REPORT

Salaried Employees	<u>76*</u>	Minority Employees #, %	
Hourly Employees	<u>172</u>	Salaried	<u>6</u> <u>8%</u>
Total Employees	<u>248</u>	Hourly	<u>66</u> <u>38%</u>
		Total	<u>72</u> <u>29%</u>

Employees (Hourly)

New Employees	<u>0</u>	Hourly Min. Hired	<u>0</u>
Terminations	<u>0</u>	% Min. Hired	<u>0</u>
		Hourly Min. Term.	<u>0</u>
		% Min. Term.	<u>0</u>

DEPARTMENTS	PAR	#EMPLOYEES	MIN. EMP.	3MIN.	NEW HIRES	YTD	TERM.	YTD	TURNOVER	YTD
Warehouse	<u>16</u>	<u>15</u>	<u>8</u>	<u>53</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Gen. Plant	<u>13</u>	<u>16</u>	<u>5</u>	<u>31</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Maintenance	<u>41</u>	<u>41</u>	<u>10</u>	<u>24</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Laboratory	<u>24</u>	<u>24</u>	<u>5</u>	<u>22</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Compound	<u>40</u>	<u>38</u>	<u>26</u>	<u>67</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Vinyl	<u>33</u>	<u>33</u>	<u>10</u>	<u>30</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Plasticizer	<u>5</u>	<u>5</u>	<u>2</u>	<u>40</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Number of Applicants:

Month 0 Year To Date 0

APPLICANT BREAKDOWN:

Minority 0 % Minority 0

Female 0 % Female 0

Hires (Hourly):

Month 0 Year To Date 0

Terminations (Hourly):

Month 0 Year To Date 0

Overall Turnover 0

Projected Annual Turnover 0

* Includes 1 Co-op Student.

CCR 000006282

ABERDEEN CHEMICAL PLANT

DEPARTMENTAL HOURS ANALYSIS REPORT
DISTRIBUTION RMS, JFC, JUV, DEPARTMENT HEADS, FILE
2/5/90 TH 3/4/90

FEBRUARY, 1990

DEPT	STRA TIME	OVERTIME HOURS	AS A % OF	ABSENCE	SICKNESS	PAID	NONPAID	TOTAL	YEAR-TO-DATE	VACATION
YARD	1232.00	170.25	13.82	0.00	0.00	0.00	0.00	0.00	1.46	92.00
UTILITY	504.00	186.50	37.00	168.00	33.33	0.00	0.00	33.33	7.44	0.00
MAINTENANCE	5439.75	669.25	12.30	224.25	2.21	0.59	1.33	4.12	5.07	256.00
QC LAB	2872.00	147.75	5.14	12.00	0.00	0.00	0.42	0.42	2.43	96.00
JANITORS	312.00	4.75	1.52	0.00	0.00	0.00	0.00	0.00	0.25	8.00
WAREHOUSE	950.75	152.75	16.07	369.50	37.86	0.00	1.00	38.86	9.99	0.00
STORES	304.00	17.00	5.59	1.00	0.00	0.00	0.33	0.33	1.72	16.00
DEVELOPMENT LAB	952.00	94.50	9.93	0.00	0.00	0.00	0.00	0.00	0.57	8.00
DRY BLEND	937.00	157.50	16.81	0.00	0.00	0.00	0.00	0.00	0.63	84.00
COMFOUND	6183.50	1019.75	16.49	63.50	0.00	0.65	0.38	1.03	3.34	156.00
VINYL	5979.50	409.25	6.84	113.75	0.20	1.00	0.70	1.90	1.54	180.00
PLASTICIZER	769.00	32.50	4.23	51.00	6.24	0.00	0.39	6.63	4.52	12.00
GENERAL HELPERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TOTAL PLANT

26435.50 0.00 3061.75 11.58 1003.00 2.68 0.50 0.62 3.79 3.20 908.00

TOTAL PLANT HOURS FOR JURY DUTY..... 48.00
TOTAL PLANT HOURS FOR NATIONAL GUARD/RESERVE DUTY..... 0.00
TOTAL PLANT HOURS FOR DEATH IN FAMILY..... 84.00

CCR 000006283

ABERDEEN CHEMICAL PLANT
 DEPARTMENTAL HOURS ANALYSIS REPORT
 DISTRIBUTION LIST RWS, JFC, JVV, DEPARTMENT HEADS, FILE
 10/ 2/89 TH 3/ 4/90

FISCAL Y.T.

DEPT	STR TIME HRS WRKD	OVERTIME HOURS		OVERTIME AS A % OF STR TIME	ABSENCE HRS LOST	ABSENCE AS A % OF STRAIGHT TIME				YEAR-TO- DATE	VACATION HOURS
		OVERTIME NONCONTROL	HOURS CONTROL			SICKNESS	OTHER PAID	NONPAID	TOTAL		
YARD	6721.75	252.00	764.75	15.13	91.75	0.00	0.54	0.83	1.36	1.46	668.00
UTILITY	3230.50	144.00	656.50	24.78	252.00	7.80	0.00	0.00	7.80	7.44	240.00
MAINTENANCE	27171.00	307.75	4487.25	17.65	1363.00	3.83	0.35	0.84	5.02	5.07	2440.00
QC LAB	14987.00	324.00	710.00	6.90	332.25	1.12	0.08	1.02	2.22	2.43	784.00
JANITORS	1915.00	0.00	78.75	4.11	5.00	0.00	0.00	0.26	0.26	0.25	208.00
WAREHOUSE	5264.00	0.00	424.25	8.06	546.25	9.35	0.46	0.57	10.38	9.99	472.00
STORES	1564.75	0.00	56.50	3.61	28.25	0.00	0.00	1.81	1.81	1.72	124.00
DEVELOPMENT LAB	4554.50	66.25	423.00	10.74	27.25	0.53	0.00	0.07	0.60	0.57	536.00
DRY BLEND	4986.75	36.00	426.50	9.27	33.00	0.00	0.00	0.66	0.66	0.63	388.00
COMPOUND	32065.75	240.00	2835.00	9.59	1057.50	2.40	0.35	0.55	3.30	3.34	1456.00
VINYL	32257.50	1152.00	3264.75	13.69	519.25	0.48	0.31	0.82	1.61	1.54	1800.00
PLASTICIZER	4040.50	60.00	140.75	4.97	153.75	2.38	0.00	1.43	3.81	4.52	240.00
GENERAL HELPERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL PLANT	138759	2582.00	14268.00	12.14	4409.25	2.16	0.27	0.74	3.18	3.20	9372.00

TOTAL PLANT HOURS FOR JURY DUTY..... 68.00
 TOTAL PLANT HOURS FOR NATIONAL GUARD/RESERVE DUTY..... 12.00
 TOTAL PLANT HOURS FOR DEATH IN FAMILY..... 300.00

CCR 000006284

ADMINISTRATIVE SERVICES - J. E. Little

Safety

There were no safety instances this month. Safety handbooks were distributed followed by a presentation from the Safety Department.

Cost Savings

Savings due to competitive bidding were \$8,625 for February, and \$71,464 for FY1990.

Savings due to prompt payment discounts were \$1,641 for February, and \$10,517 for FY1990.

Warehouse - Finished Goods Inventory

Slow moving inventories are still a major concern. A revised listing of old compounds will be given to Fred Williams.

Flexible Compounds	811,474
Rigid Compounds	<u>101,120</u>
Slow Moving Compounds	912,594

Fred Williams was advised that approximately twenty-five percent of our packaged inventory was either slow moving or off-grade.

Development

Three employees attended Interaction Management Class at the Aberdeen Best Western: Pat Wells and Tommy Cummings, 2/14 - 2/16; and Mike Swierc 2/26 - 2/28.

Ruth Morris was in Aberdeen 2/08 - 2/09 to work with Judy Frossard on the PMS conversion to PC application. Final conversion from the main frame is estimated to be 3/31/90.

Several employees attended forklift training class on 2/27. Additional hands-on training is scheduled for March.

Meetings

<u>2/01</u>	Supervisor meeting at the Best Western.
<u>2/05</u>	Jack Little and Mike Kane - Finalize Q-Support card.
<u>2/08</u>	Jack Little, Mike Swierc and Pat Wells - Develop procedure for handling Gold Bond raw materials.
<u>2/13</u>	Jack Little met with Dale Reynolds from Exxon to review exchange balance.

ADMINISTRATIVE SERVICES - Continued

Meetings - continued

- 2/14 Bob Seymour and Jack Little met to review FY90 goals.
- 2/21 Teresa Pounders and Linda Michels attended a vendor appreciation presentation (Union Camp) in Lafayette, LA.
- 2/27 Jack Little met with Yellow Freight to review LTL discounts.

----- Numerous negotiations/preparation meetings for the 3/19/90 contract expiration.

CCR 000006286

ABERDEEN CHEMICAL PLANT
SHIPPING ANALYSIS
FEBRUARY 1990

-SHIPMENTS BY PRODUCTS-	MORTH			YTD		
	PUBLIC	IPY/ITC	EXCHANGE	PUBLIC	IPY/ITC	EXCHANGE
RESIN-BULK	18,852,060	9,183,540	0	91,757,882	48,000,110	1,234,900
RESIN-PACKAGED	471,054	221,200	886,150	1,770,156	1,167,950	0
FLEXIBLE COMPOUND-BULK	1,507,510	739,050	0	7,289,290	4,217,200	0
FLEXIBLE COMPOUND-PACKAGED	3,061,605	425,950	0	14,624,546	1,007,878	0
NEW BUSINESS	1,500	0	0	6,864	0	0
RIGID COMPOUND-BULK	4,174,090	1,056,650	0	18,698,280	2,952,650	0
RIGID COMPOUND-PACKAGED	201,887	4,200	0	1,030,321	17,000	0
PLASTICIZER	170,920	0	0	608,880	1,223,000	364,000
TOTAL	28,440,626	11,630,590	886,150	135,786,219	58,585,788	1,598,900

-SHIPMENTS BY MODE-

BULK:	RAILCAR	CUSTOMER PICKUP	COMMON CARRIER	TOTAL
FEBRUARY				
RESIN	153	11	36	200
FLEXIBLE COMPOUND	11	0	6	17
RIGID COMPOUND	21	3	27	51
PLASTICIZER	0	0	4	4
TOTAL FEBRUARY	185	14	73	272
YTD				
RESIN	706	124	275	1,105
FLEXIBLE COMPOUND	58	3	22	83
RIGID COMPOUND	103	13	81	197
PLASTICIZER	9	0	14	23
TOTAL YTD	876	140	392	1,408

CCR 000006287

PACKAGED:	CUSTOMER PICKUP	COMMON CARRIER	TOPC	CONTAINER	AIR/OPS	TOTAL
FEBRUARY						
RESIN	5	15	0	0	13	33
FLEXIBLE COMPOUND	19	76	0	0	4	99
RIGID COMPOUND	0	8	0	0	0	8
PLASTICIZER	0	0	0	0	0	0
TOTAL FEBRUARY	24	89	0	0	17	140
YTD						
RESIN	23	66	0	0	37	126
FLEXIBLE COMPOUND	98	357	2	0	12	469
RIGID COMPOUND	6	35	0	1	1	43
PLASTICIZER	0	1	0	0	1	2
TOTAL YTD	127	459	2	1	51	640

LABORATORY - J. M. Edwards, Jr.

- A. Safety - There were no safety incidents in the Laboratory for February. The monthly safety meeting topic was the "Vista Safety Handbook" with Billy Paul Sizemore in charge of the meetings.
- B. Customer Contacts - El Paso, a PVC division of Group Dekko, made a plant visit to learn about our process. Vista supplies them 5415.
- C. Customer O.C. Problem Reports

2/01 - Klockner-Pentaplast, Gordonsville, GA - When the customer sampled this car, they found very high quantities of contamination. This was communicated to the plant and when the plant investigated the origin of the contamination, it was discovered that the car was loaded from a start-up silo. It was quickly decided then to pull this car out and divert it to another customer less sensitive to contamination.

2/06 - Condutel, Mexico - The customer reported finding green pellets and black and grey contamination in 34501 BGE. Samples have been received at the plant and are being analyzed.

D. Requests for Corrective Action

2/08 - AT&T Technologies, Omaha, NE - The corrective action requested was how to prevent future occurrences of contamination in shipments of 34862 BGE 10 compound. The contamination was determined to be "paper fibers" and the corrective action was to use only sharp knives when opening raw material bags as they are introduced to the system.

E. Product Waivers

<u>Customer</u>	<u>Product</u>	<u>Reason</u>	<u>No.</u>
B. P. Performance	5415	Static Flow	1 R/C
Capitol/Guardian	5415	Static Flow	1 R/C
Essex Group	5415	Static Flow	1 R/C
Export	5265	Moisture	1 R/C

CCR 000006288

LABORATORY - Continued

F. RVCM Summary

RVCM of In-Process Samples

The following is a summary of residual VCM results on in-process samples. None of the reactor daily averages exceeded 400 ppm RVCM during the month of February, 1990.

	Reactor <u>Slurries</u>	<u>Drier</u>	
		<u>5265</u>	<u>5305</u>
Number of Samples	851	38	75
Average RVCM, ppm	116	0.926	0.835

RVCM of Shipment Samples

The following is a summary of the residual VCM analysis of shipment samples for the month of February, 1990.

<u>Product</u>	<u>Number of Samples</u>	<u>Average RVCM, ppm</u>
5265	46	0.733
5305	96	0.565
5385	54	0.680
5395	0	0
5415	62	0.053
5465	0	0
Dry Blend	61	0.124
Debox	12	0.854
Pond	14	2.350

G. Resin Process Capabilities (based on dryer "regulars")

	<u>5265</u>	<u>5305</u>	<u>5385</u>	<u>5415</u>
Bulk Density	1.94	2.50	2.03	1.08
Inherent Viscosity	0.67	0.35	0.75	1.14
(vs. 0.715 - 0.744)	----	0.18	----	
L Color	8.11	2.53	3.25	7.17
A Color	6.33	3.83	----	
B Color	3.17	2.83	2.67	7.00
% on Pan	2.33	1.21	2.58	6.17
(vs. 2%, max.)	----	----	----	1.17
% thru 140 Mesh	0.66	0.68	1.64	5.33
Drytime	----	----	2.00	2.00
Mets I.R.	----	----	----	3.33
(vs. 95% of control)	----	----	----	2.07
Hard Particles, (% > 10)	----	----	7.9	1.2
Average particle size, microns	142	138	160	173

CCR 000006289

LABORATORY - Continued

H. Flexible Compound Quality Summary

	<u>Adjustments</u>		<u>Rejections</u>	
	<u>M Lbs. (%)</u>		<u>M Lbs. (%)</u>	
Hardness	7.0	<0.11>	11.4	<0.19>
Color	----	----	20.8	<0.34>
Hard Particles	----	----	53.1	<0.87>
Heat Stability	----	----	8.0	<0.13>
Dicing	----	----	8.4	<0.14>
Cross Contamination	----	----	1.4	<0.02>
Streamers	----	----	<u>10.8</u>	<u><0.18></u>
Totals	7.0	<0.11>	113.9	<1.86>

I. Rigid Compound Quality Summary

	<u>Rejections</u>	
	<u>M Lbs. (%)</u>	
Color	33.8	<0.61>
Total	33.8	<0.61>

J. Miscellaneous

1. The HS 100 gas chromatograph used for RVCM testing was down for 2 1/2 days until repairs could be made. Perkin-Elmer had been called prior to the instrument failure. It took six days for Perkin-Elmer to respond with a repairman.
2. Dave Cox, Billy Paul Sizemore and Richard Williams attended a three-day course in Interaction Management.
3. Five of six natural teams met once during the month. "Team Meeting Planning and Management" was taught to each natural team by their respective facilitators.
4. The IBM PC used for faxing certificates of analysis was down two days for repair. This computer had been in service five years without major repair.
5. A newer and better version of SQC software was used to report SPC charts of resin shipments this month.

SAMPLE SHIPMENTS

FEBRUARY 1990

RESIN

<u>Ship Date</u>	<u>Product</u>	<u>Amount</u>	<u>Customer</u>
2/06/90	5415 Control	50 lbs.	Vista - Ok. City
2/06/90	Pond Resin	50 lbs.	Conex of Georgia
2/07/90	Pond Resin	5 lbs.	VCLA - Houston
2/07/90	Pond Resin	50 lbs.	PARAGON TRADING
2/08/90	Pond Resin	10 lbs.	Osterman
2/08/90	Pond Resin	200 lbs.	IMP. & EXP. JOREGA SA DE CU
2/08/90	Pond Resin	200 lbs.	QUIMPAC CIA. LTDA.
2/09/90	Pond Resin	1 lb.	Ravago Company
2/13/90	Pond Resin	5 lbs.	Kare Plastics
2/14/90	Debox Resin	1 lb.	Osterman
2/19/90	5395	50 lbs.	Decorative Coverings
2/20/90	5265	100 lbs.	Morton International
2/20/90	5305	50 lbs.	GLASSIDUR S. A.
2/21/90	5385	200 lbs.	Premier Polymers
2/23/90	5305	15 lbs.	Gassen Corporation
2/23/90	5415	50 lbs.	DuPont Polymer Products
2/28/90	5415	400 lbs.	INYECCIONES INDUSTRIALES

COMPOUND

<u>Ship Date</u>	<u>Product</u>	<u>Amount</u>	<u>Customer</u>
2/01/90	48562 BLK	5 lbs.	Premier Polymers - LGH
2/05/90	34311 NAT	200 lbs.	Superior Cable
2/07/90	PLENEX 419-50D	200 lbs.	Fluorocarbon
2/09/90	34431 NAT	100 lbs.	CONDUCEN, S. A.
	35852 NAT	100 lbs.	

CCR 000006291

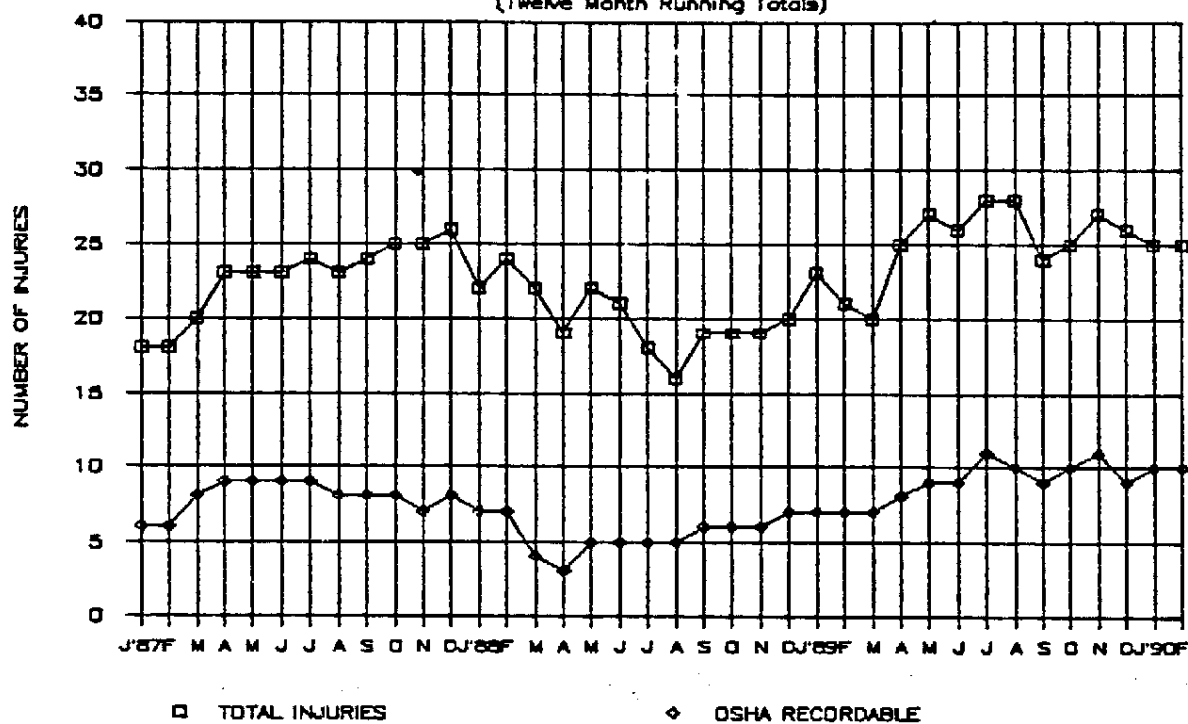
COMPOUND (cont.)

<u>Ship Date</u>	<u>Product</u>	<u>Amount</u>	<u>Customer</u>
2/12/90	34311 NAT	200 lbs.	ELECTROCONDUCTORES
	38631 WHT	200 lbs.	
2/12/90	35852 NAT	500 lbs.	ITT A. E. P. D.
2/27/90	39012 BLK	200 lbs.	Superior Cable
2/27/90	452-32A BLK	1500 lbs.	Times Fiber

CCR 000006292

ABERDEEN CHEMICAL PLANT INJURIES

(Twelve Month Running Totals)

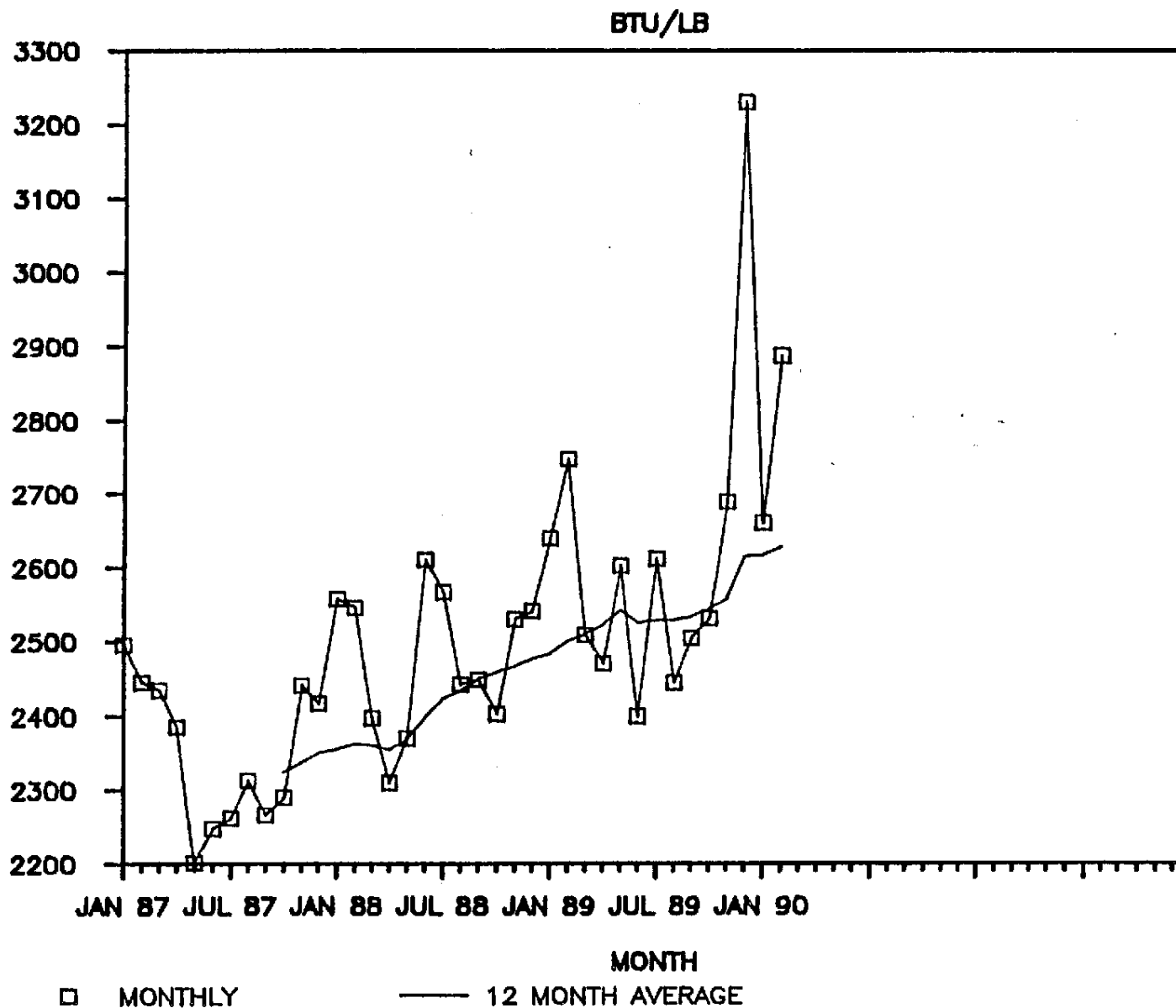


CCR 000006293

ABERDEEN ENERGY CONSUMPTION

BTU/LB

CCR 000006294



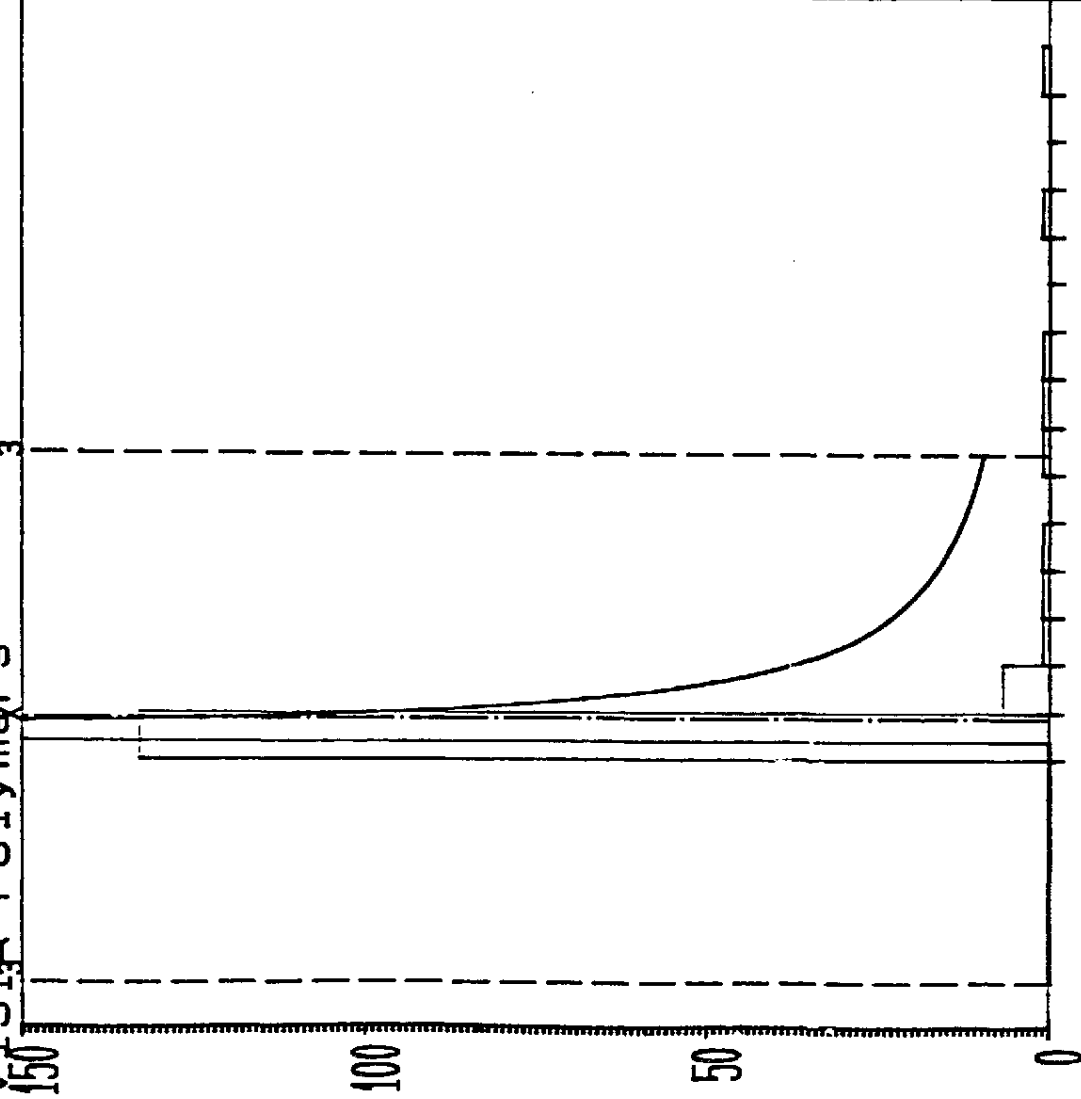
RECEIVED

APR 11 90

662900000 830

5415 RVCN 2ND Q FY90 WILLIAM L. McCLAIN 04-02-1990

VISTA Polymers



0.8059
0.7484
0.6908
0.6333
0.5758
0.5182
0.4607
0.4032
0.3456
0.2881
0.2306
0.1731
0.1155
0.0580
0.0005

Date: 04-02-1990

Interval = 0.0575

All samples (n=1)

148 data points

lower boundary

Mean = 0.0505

Sigma Indiv = 0.1060

Est. Sigma = 0.0428

Coeff. Var. = 2.0989

Min. Value = 0.001

Max. Value = 0.863

Kurtosis = 31.743

Skewness = 5.386

Chi Squared = 10.712

deg. free. = 1

Conf. Level = 95%

Beta fails ChiSq

Capability

Using Sigma Indiv

Cpk = 2.33

Cp = 2.33

Cr = 0.43

Z upper = 18.38

Z lower =

Actual %

Above Spec = 0.00

Below Spec = 0.00

Out of Spec = 0.00

Theoretical %

Above Spec = 0.00

Below Spec = 0.00

Out of Spec = 0.00

Mean + 3s = 0.3686

Mean - 3s = -0.2676

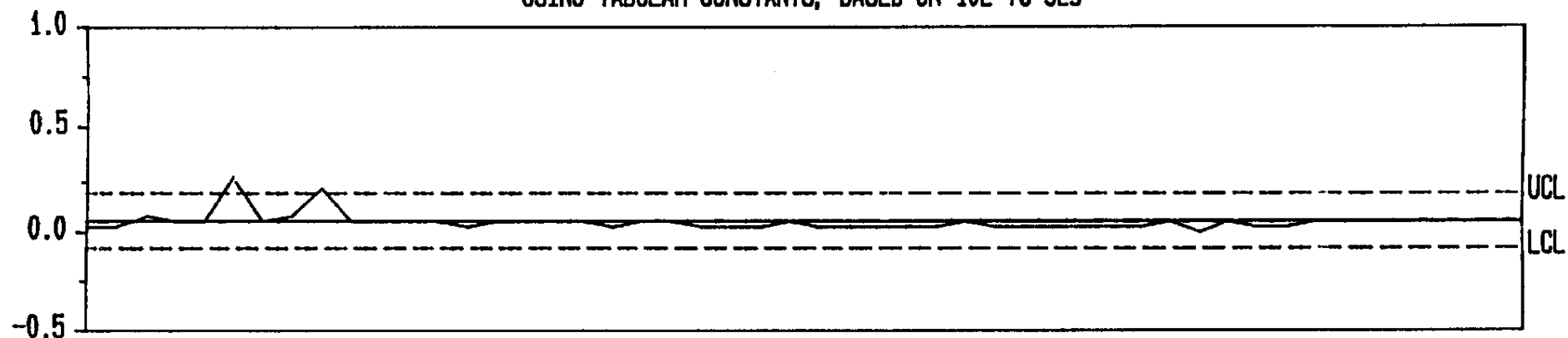
5415 RVCM 2ND Q FY90
VISTA POLYMERS

04-03-1990

Individuals

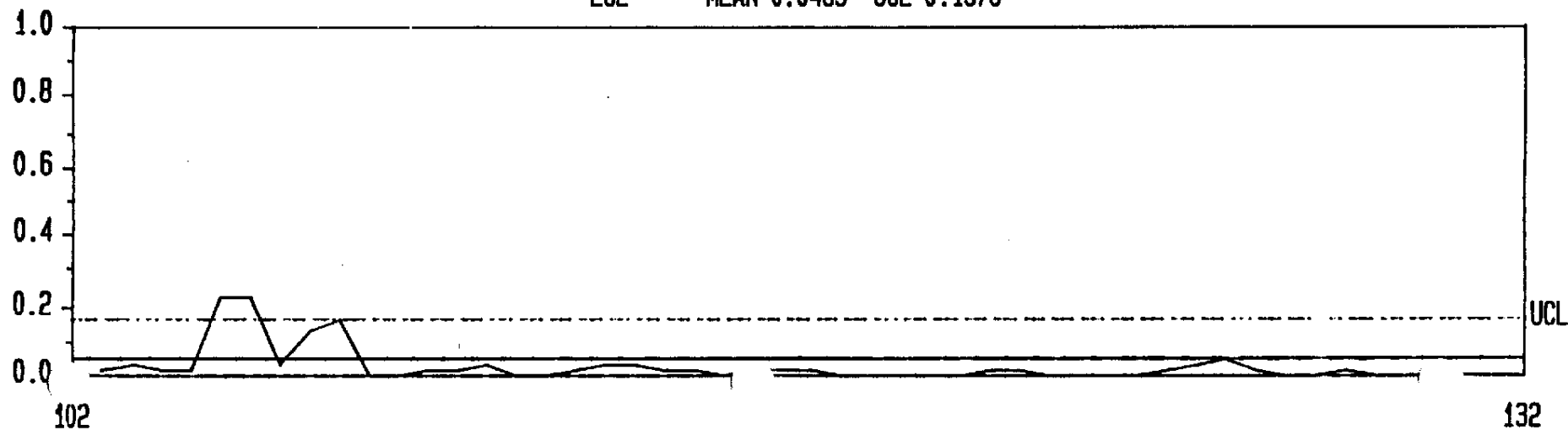
LCL=-.0778 MEAN=0.0505 UCL=0.1789

USING TABULAR CONSTANTS, BASED ON 102 TO 329



Moving range, n=2

LCL=--- MEAN=0.0483 UCL=0.1576

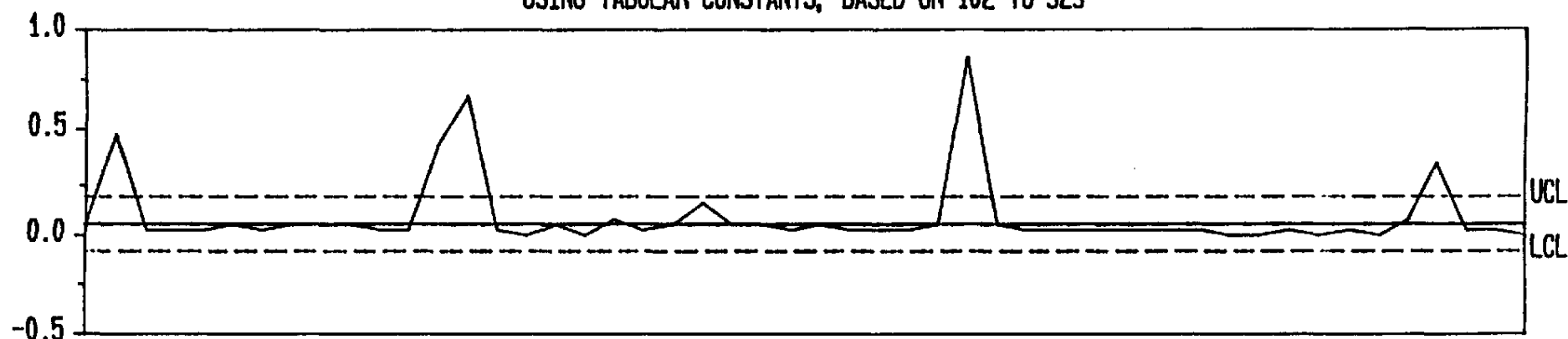


5415 RVCM 2ND Q FY90
VISTA POLYMERS

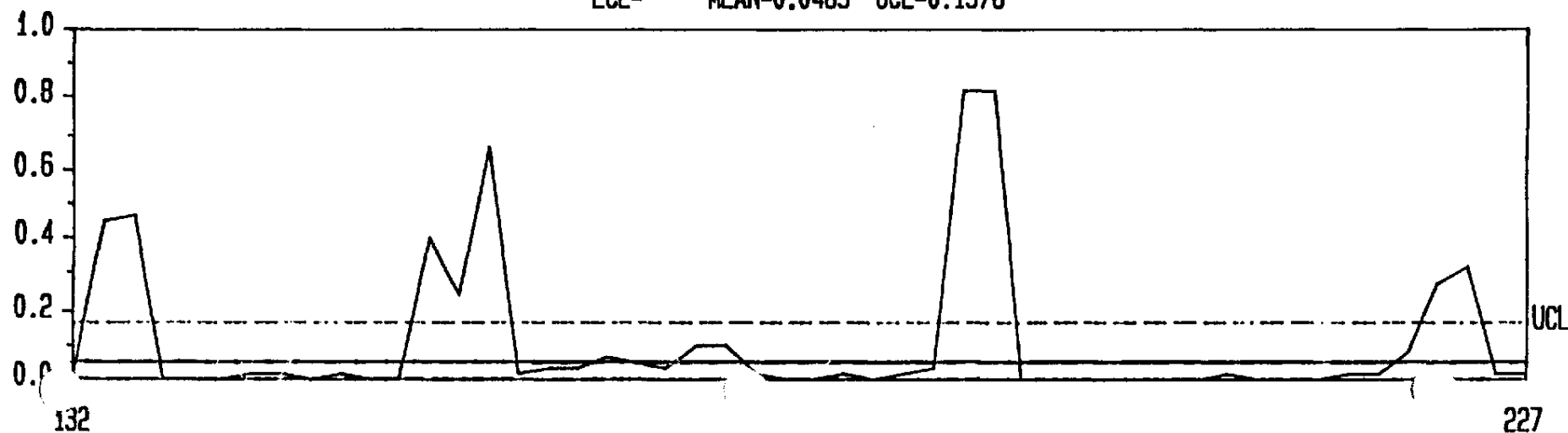
04-03-1990

CCR 000006297

Individuals
LCL=-.0778 MEAN=0.0505 UCL=0.1789
USING TABULAR CONSTANTS, BASED ON 102 TO 329



Moving range, n=2
LCL=--- MEAN=0.0483 UCL=0.1576



5415 RVCM 2ND Q FY90
VISTA POLYMERS

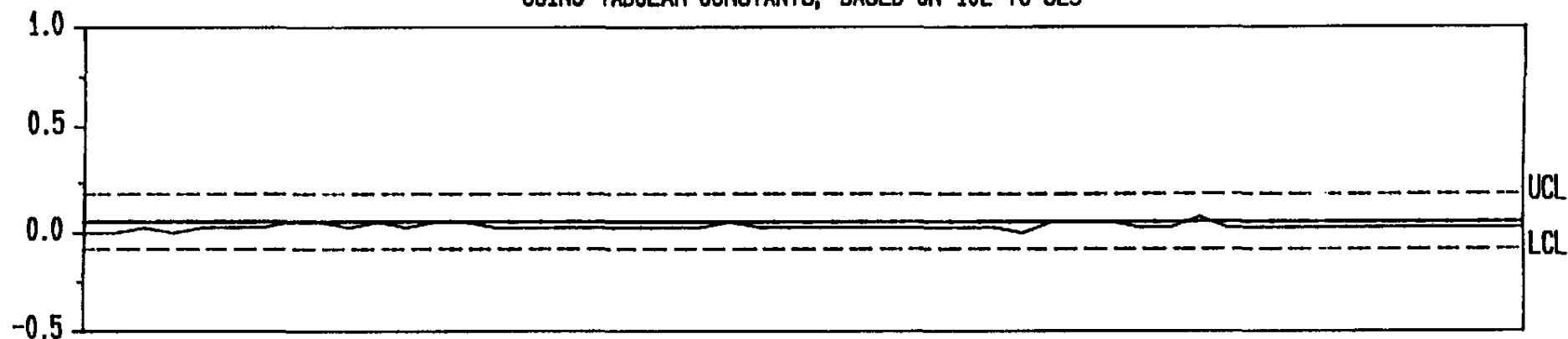
04-03-1990

CCR 000006298

Individuals

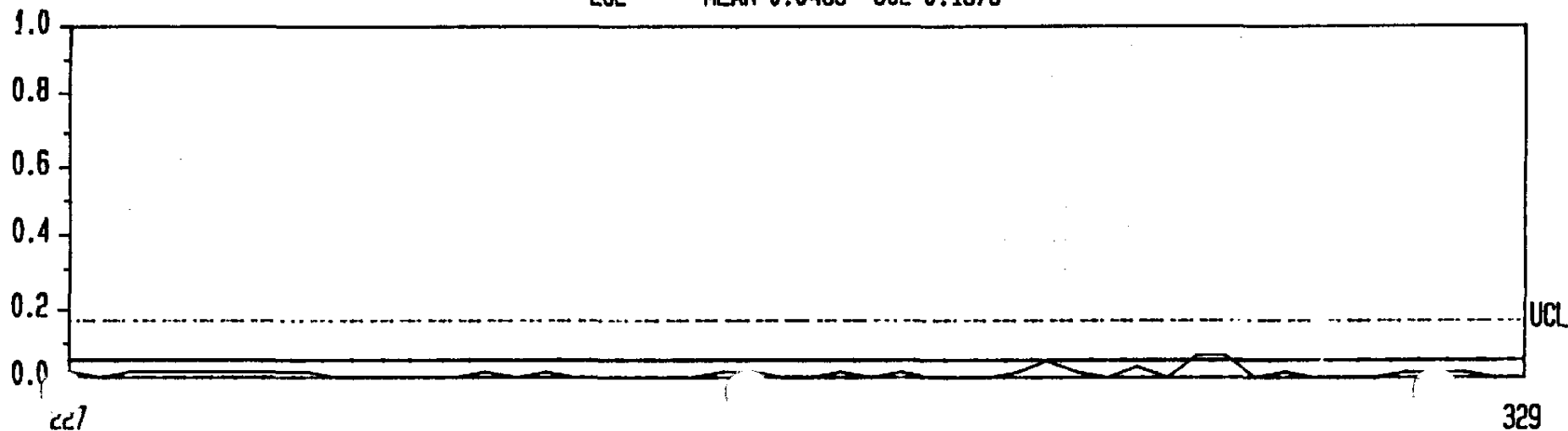
LCL=-.0778 MEAN=0.0505 UCL=0.1789

USING TABULAR CONSTANTS, BASED ON 102 TO 329



Moving range, n=2

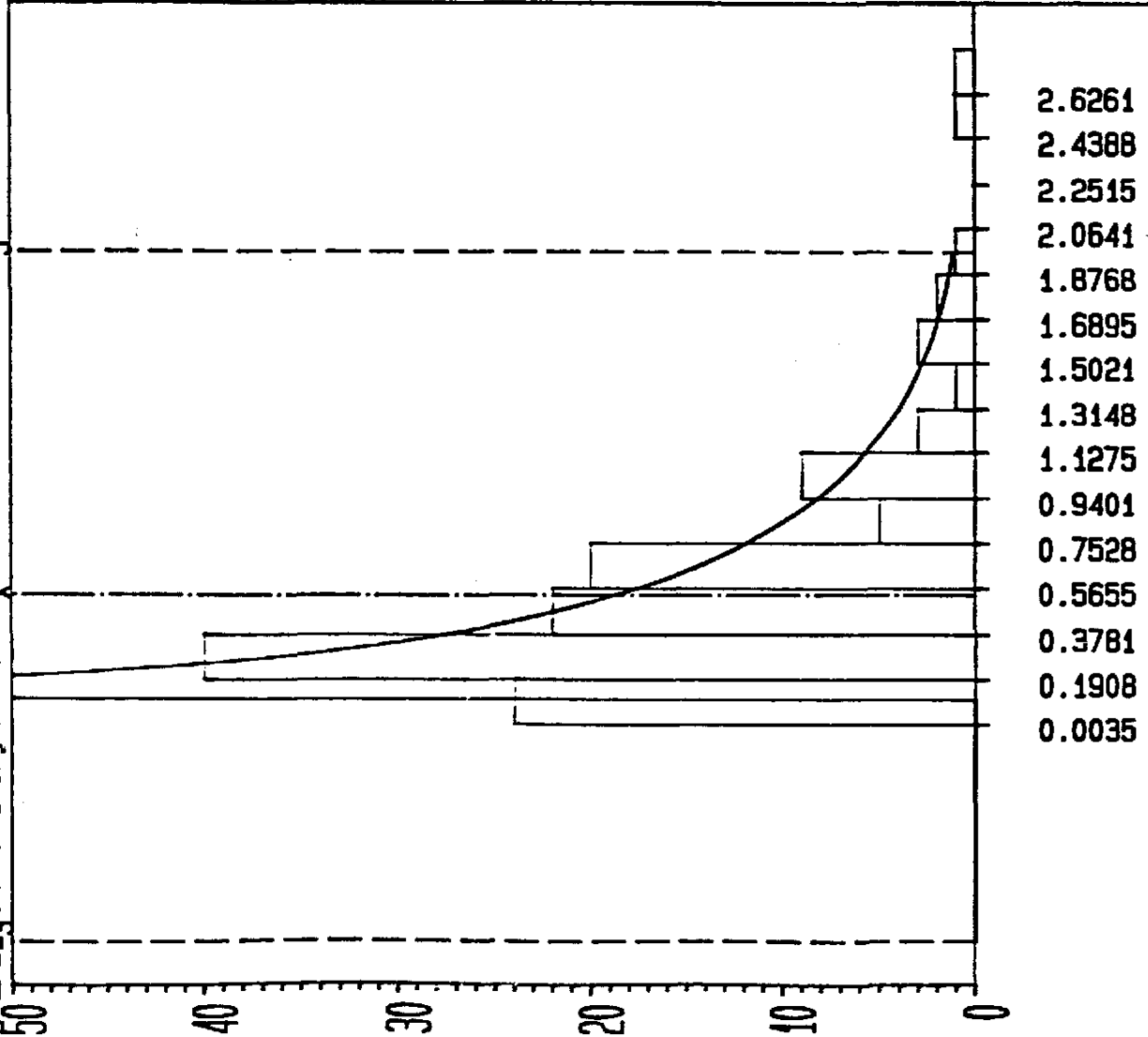
LCL=--- MEAN=0.0483 UCL=0.1576



5385 RVCM 2ND Q FY90

04-02-1990

VISTA Polymers



Date: 04-02-1990

Interval = 0.1873

All samples (n=1)

132 data points

lower boundary

Mean = 0.5367

Sigma Indiv = 0.4776

Est. Sigma = 0.4444

Coeff. Var. = 0.8899

Min. Value = 0.004

Max. Value = 2.813

Kurtosis = 5.182

Skewness = 1.991

Chi Squared = 7.915

deg. free. = 4

Conf. Level = 95%

Beta

Capability

Using Sigma Indiv

Cpk = 0.58

Cp = 0.58

Cr = 1.74

Z upper = 3.06

Z lower =

Actual %

Above Spec = 1.52

Below Spec = 0.00

Out of Spec = 1.52

Theoretical %

Above Spec = 1.92

Below Spec = 0.00

Out of Spec = 1.92

Mean + 3s = 1.9695

Mean - 3s = -0.8961