COMPANY CONFIDENTIAL

Ed Bowles

Monsanto

Anniston Plant

TECHNICAL SERVICES DEPARTMENT

MONTHLY REPORT

Anniston

C. K. Eastman
C. A. Rose
J. C. Landwehr
L. J. Boesch
G. W. Miller
W. B. Papageorge
W. F. Taffee
H. L. Williams

General Offices

H. S. Bergen
H. C. Carder
W. R. Robirds
J. Danna (5)
P. B. Hodges
D. B. Hosmer (2)
W. A. Kuhn
C. F. Luacke
N. L. Sample
J. E. Smith
R. J. Stratmeyer
H. S. Trail

OTHER LOCATIONS

D. W. Jackson - WGK
T. M. Patrick - So. 2nd St.
A. H. Forsten - Alvin, Texas

Summary

June, 1969

Cost Improvement Results

	Est. Act.	Target	% of Target
Month	$49,320	$60,235	81.7%
YTD	$182,285	$239,725	76.1%

Organic Division

Received State license and radioactive source for Solid Aroclor yield improvement instrumentation project which completes all outstanding equipment items for this project. The project is in maintenance for construction.

Long term run to meet FDA approval for chlorinated biphenyl (PCB) in Solid Aroclor 5460 started in June. A project will be written to provide additional still cooling capacity needed to attain the desired 0.1% PCB level.

Muriatic Acid coalescer started up on 6/19 and is successful in removing organic contaminants from the acid to < 50 ppm prior to final carbon treatment. Evaluation of the performance of the coalescer will be made in July. The 150,000 gallon Muriatic Acid storage tank is ready to be put in service when needed.

Construction of chlorine unloading facilities for Nirsn to be completed 7/18. Probable start-up will be 7/21 with a slight delay due to special chlorine valves. Chlorine unloading at Aroclor continues to run smooth except for automatic shutoff when the tank car empties.

DSW 014035-

Agricultural Division

Sulfur Recovery Project to be picked up by CED in early July. Flow diagrams and material balances have been completed by Anniston TSD. PR&D work completed Report to be issued

AH-306 REV 11 1 1964

COMPANY CONFIDENTIAL INFORMATION

"This document contains confidential information which is the property of Monsanto Company. Only those portions of the document relevant to a duly authorized individual's need to know may be exerpted for him. The report must not be sent outside the Company without written approval and the recipient is accountable for its safe keeping, exerpting or otherwise disclosing of its contents and for its proper disposal.

PENGAD-Bayonne, N. J.
EXHIBIT
P-13
3-13-01
Papageorge

Notes on Cost Improvement Program

Targets for 1969 when broken down by products assigned to the Business Groups line up as follows:

Functional Fluids - Organic

Biphenyl	$104,800	
Santowax	$ 22,000	
Liq. Aroclor	$ 55,300	
HB-40	$ 8,300	
	$190,400	- 30% of total

Plasticizers and General Chemicals - Organic

Solid Aroclor	$142,605	
HB-40	$ 27,700	
PNP	$ 65,400	
HCl	$ 22,740	
Chlorine	$ 64,160	
	$322,605	- 50% of total

Crop Protectors - Agricultural

Parathion	$117,015	- 18% of total

Utilities - Plantwide

	$ 11,200	- 2% of total
1969 CIP Target	$641,220	100%

Cost Improvement Program results YTD are low by $57 M or 24% of the $240 M total plant YTD target; Organic Division results: 69% of the $210 M target; Agricultural Division results: 128% of $30 M target; combined results: 76%.

Production schedules have on balance contributed to the savings program. High sales and shipments have contributed greater than targected productivity savings for the Miran formulation project, 2nd HB-40 autoclave and the HCl off-gas catch tank project while eliminating any savings on the 150 M gallon HCl storage project. The shift to Santowax over Biphenyl has cut into productivity targets for the newly modified tube unit while lower Liquid Aroclor production has resulted in losses on 4465 Blending and New Burners #3 Still. A $30 M plus contribution of productivity was reduced $16 M by the negative factors

Delayed completion of four projects has cost the Organic Division CIP $30 M YTD. These projects are 1) Solid Aroclor Chlorinator and Still Instrumentation, 2) Flaking of Montar 5, 3) Montar Disposal from Liquid Aroclor Stills, and 4) PNP Filter Wash Water Pump. Timetables are being developed to assure prompt completion.

DSW 014037

HARTOLDMON0017930

ORGANICS DIVISION
1969 TSD COST IMPROVEMENT

	ANNUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Sol Aro. Level	TAR				2250	2250	2250	2250	2250	2250	2250	2250	2250
Ind.& -Still Spd	EST				-	-	-						
AFE 3015	ACT				-	-	-						
Solic Aro.	TAR	2600	2600	2600	2600	2600	2600	2600	2600	2600	-	-	-
Lower 5060	EST	1500	5493	4390	2150	467	3000						
Soft. Point	ACT	1500	5140	4890	2150	4670							
Sol.Aro.-Still	TAR				160	170	160	170	160	170	160	170	160
Coolant temp.	EST				-	-	-						
AFE 3015	ACT												
Sol.Aro.-Chlorto	TAR				390	390	390	390	390	390	390	390	390
Batch End	EST				-	-	-						
AFE 3015	ACT				-								
Sol.Aro. Yield	TAR					2750	2750	2750	2750	2750	2750	2750	2750
SW/R Composition	EST					-	-						
AFE 3016	ACT												
Solid Aro.	TAR					1080	1080	1080	1080	1080	1080	1080	1080
Montar 5 Flake	EST					-	-						
AFE 2949	ACT												
Sol.Aro.	TAR	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
Blend 4465	EST	1690	1920	1680	1490	710	1180						
	ACT	1690	1920	1680	1490	710							
Sol.Aro.-Verti-	TAR	70	80	70	80	70							
cal Still Cond.	EST	70	90	90	90	90	-						
AFE 2324	ACT	70	90	90	90	90							
Sol.Aro.Cl_2	TAR			940	940	950							
T/C Dock	EST			0	-	-							
AFE 2342	ACT			0	-	-							
Sol.Aro.-New Cl_2	TAR						950	940	950	940	950	940	950
Unload - No Delay	EST					900	2330						
CED 1831	ACT					900							
Solid Aro.-Flake	TAR	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
& Drum	EST	0	0	1000	2000	2000	2000						
CED 1430	ACT	0	0	1000	2000	2000							
Liq.Aro.	TAR	3000	3000	-	-	-	-	-	-	-	-	-	-
48-53 M #/yr.	EST	0	5500	-	-	-	-						
AFE 2545	ACT	0	5500	-	-	-							
Liq.Aro.-No.2	TAR										3000	3000	
Still Entrain Sep.	EST												
AFE 3093	ACT												
Liq.Aro.-Montar	TAR			1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
Disposal	EST			0	0	0	0						
AFE 2952	ACT			0	0	0							
Warehouse	TAR	2000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
Reduce Manpower	EST	2000	2000	2000	3000	3000	3000						
CEA 1452	ACT	2000	2000	2000	3000	3000							
Liq.Aro.New	TAR			1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Burners #3 Still	EST			0	0	1500	3000						
	ACT			0	0	1500							
Biphenyl Relocate	TAR	500	500	500	500	500	500	500	500	500	500	500	500
No. 1 Preheat	EST	1500	0	1560	1370	0	0						
CEA 1892	ACT	1500	0	1610	1370	0							
AB-40	TAR	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
2nd Autoclave	EST	2230	2360	0	600	9000	6000						
AFE 3102	ACT	2300	2423	0	600	10,400							

DSW 014039

HARTOLDMON0017931

ORGANIC DIVISION
1969 TSD COST IMPROVEMENT

		ANNUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BIO Improve Tower Treat. AFE 3155	TAR						450	450	450	450	450	450	450	450
	EST						0	0						
	ACT						0							
Improve Plt. Power Factor	TAR						900	900	900	900	900	900	900	900
	EST						0	900						
	ACT						0							
Central Air System	TAR										1000	1000	1000	1000
	EST													
	ACT													
Optimize Rx Time PNP	TAR			2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
	EST			0	3420	0	0	0						
	ACT			0	3420	0	0							
Reduce Mole Ratio NaOH/PNCB PNP	TAR					4000	4000	4000	4000	4000	4000	4000	4000	4000
	EST					0	0	0						
	ACT					0	0							
New Wash Water Pump - PNP AFE 2998	TAR						50	50	50	50	50	50	50	50
	EST			25	50	50	50	50						
	ACT			25	50	50	50							
Automatic pH Control PNP	TAR											500	500	500
	EST													
	ACT													
HCl Filter Pump	TAR		330	330	340									
	EST		330	330	340									
	ACT		330	330	340									
New Blow Tank HCl	TAR		200	200	200	200	200	200						
	EST		200	200	200	200	200	200						
	ACT		200	200	200	200	200							
150,000 Gal.-HCl Storage Tank AFE 2468	TAR					1760	1760	1780	1760	1760	1780	1760	1760	1780
	EST					-	0	0						
	ACT					-	-							
Produce Staley Grade Acid AFE 3076	TAR								780	780	790	780	780	790
	EST													
	ACT													
Cl_2 Plt. Shutdown CEA 1831	TAR							8880	8880	8880	8880	8880	8880	8880
	EST						8880	6655						
	ACT						2230							
Hg Recover from Residue	TAR		250	250	250	250								
	EST		3910	0	0	0								
	ACT		3910	0	0	0								
Hg Wash Tank AFE 2802	TAR		250	250	250	250								
	EST		0	0	0	0								
	ACT		0	0	0	0								
Biphenyl Productivity	TAR		5600	5600	5600	5600	5600	5600	5600	5600	5600	5600	5600	5600
	EST		0	9000	15,000	0	0	0						
	ACT		1800	3900	13500	0	0							
Total Organic By Month M $	TAR		25.1	26.5	23.3	37.5	42.3	51.1	51.6	51.6	51.6	53.7	53.3	53.4
	EST			27.1	30.2	11.5	32.3	39.65						
	ACT	16.5	25.3	27.3	11.4	15.75								
Total Organic YTD M $	TAR		25.1	51.6	74.9	112.4	154.7	205.8	257.4	309.0	360.6	414.3	467.6	521.0
	EST			46.9	73.3	79.6	111.9	147.4						
	ACT	16.5	40.3	67.1	79.5	105.2								

DSW 014040

HARTOLDMON0017932

AG DIVISION
1969 TSD COST IMPROVEMENT

	ANNUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Cooling Tower Repiping AFE 2598	TAR				420	420	410	410	420	420	410	420	420
	EST				0	0	0						
	ACT				0	0							
Optimize N_2 & Cl_2 Levels	TAR				6600	6700	6700	6600	6700	6700			
	EST				0	0	0						
	ACT				0	0							
Increase Waste Acid Sales	TAR				400	300	300	400	300	300	400	300	300
	EST				0	0	0						
	ACT				0	0							
Chlorinator R.I. AFE 2244	TAR							250	250	250	250	250	250
	EST												
	ACT												
EVOP Condensation Rx.	TAR	750	750	500							500	750	750
	EST	0	0	12,615									
	ACT	0	0	12,615									
Cl_2 Unloading CEA 1831	TAR							5000	5000	5000	2000	2000	2000
	EST												
	ACT												
Recycle Wash Water AFE 2960	TAR							290	290	290	290	290	290
	EST												
	ACT												
Parathion Recovery AFE 2655	TAR										5800	5800	5800
	EST												
	ACT												
Reduce Acetone Losses	TAR										4300	4300	4300
	EST												
	ACT												
Formulations AFE 2897	TAR				1600	1600	1600	1600	1600	1600			
	EST				3000	6600	10,000						
	ACT				4300	10,400							
Change Cooling H_2O Item 737 AFE 3067	TAR				125	125	125	125	125	125	125	125	125
	EST				120	180	155						
	ACT				120	180							
Well H_2O to Jets	TAR										500	500	500
	EST												
	ACT												
Ag. Division by Month	TAR	750	750	500	9145	9145	9135	14675	14685	14695	14575	[illegible]	[illegible]
	EST			12,615	3,120	6,730	10,155						
	ACT	0	0	12,615	4,420	10,580							
Ag. Division YTD	TAR	750	1500	2000	11145	20290	29425	[illegible]	58755	73470	[illegible]	[illegible]	[illegible]
	EST			12,615	15,735	25,315	37,770						
	ACT	0	0	12,615	17,035	27,615							
	TAR												
	EST												
	ACT												
Organic Div. Untargeted - HCl Catch Tank	TAR					0	0						
	EST					5000	6250						
	ACT					0							

DSW 014041

BIPHENYL-SANTOWAX (Cont'd)

Low Biphenyl Santowax for FDA 5460	Sales Support	TSD Objective B - 7 (b)

Ran a performance test on the biphenyl distillation column from June 17 thru June 19 to determine operating conditions that would produce Santowax C with minimum biphenyl content. Around the clock TSD coverage was provided Variables studied were: bottoms temperature, reflux rate, and feed tray selection. Test results show that the biphenyl content of Santowax C was reduced from 0.5% to 0.1% by lowering feed point from 20th to 16th tray. To routinely produce Santowax C with less than 0.05% biphenyl, additional cooling with capacity is required in biphenyl distillation area. Problem will be defined and AFE issued to correct.

No. 1 Furnace Liaison (CEA-1892)	Capacity Increase	TSD Objective B - 7 (c)

Issued memo to CED on June 25 listing the Plant's final requests before closing this project.

Improve Santowax R Quality with New Distillation Column	Quality	TSD Objective B - 7 (d)

Instrumentation to control the Santowax distillation column was installed on May 27. Pluggage problems have been experienced on both high temperature Santowax C flow meters and were subsequently taken out of service. By-pass loops with blow down connections will be installed during the 2nd week of July. The capacity and yield study of the Santowax distillation column will be completed during July.

Crude Biphenyl Feed Flow Redesign Meter for Reliability	Process Study	TSD Objective B - 7 (e)

AFE approved for a project to relocate flow meter on crude biphenyl feed to the column to get an accurate and dependable reading. Design package will be transmitted in early July.

Recommendations from this review were: 1) to observe the effectiveness of the hopper vibrator in keeping the walls of the hopper free from biphenyl build-up, 2) vent hopper to the outside if vibrator doesn't work.

Hydrogen Compressor	Safety	TSD Job No 902

Issued memo recommending no additional shutdown instrumentation be installed on hydrogen compressors. Existing alarm on low suction pressure and automatic shutdown satisfy W. Howard's process safety audit recommendations of December 1967.

DSW 014043

HARTOLDMON0017934

BIPHENYL-SANTOWAX (Cont'd)

Natural Gas Interlock Switch on No. 2 Biphenyl Furnace	Safety	TSD Job No. 948

AFE issued on June 27 to install a natural gas burner cock proving switch on No. 2 furnace such as now in operation on No. 1 furnace. This switch proves that all 88 burner cocks are closed before the main Maxon valves can be opened to prevent gas accumulation in the furnace box. This project completes the 1967 biphenyl safety audit items.

HB-40 J. W. Mattern (V. R. Haupt)

Plan for Meeting Product Demands in 1970-1973	Capacity	TSD Objective B - 12 (c)

Preliminary evaluation of batch and continuous HB-40 processes indicated a savings in new fixed capital in the range of $100 M for the continuous route over batch. However, the Plasticizer and General Chemicals Business Group concluded that this lower capital investment plus a small manufacturing cost savings that might be expected from the continuous process still does not justify the laboratory, application research, and process design program that is required if the continuous process route was chosen.

CHLORINE D. W. Dudley (A. G. McCarty)

Central Chlorine Unloading - CEA 1831	TSD Back-up of Manufacturing Rep. Savings $53,300	TSD Objective B - 6 (a)

Problem with automatic isolation of empty chlorine cars not yet resolved. CED making evaluations for solving problem.

HCl J. M. Jonas, G. L. Moore, K. G. Hale (A. G. McCarty)

Production of Staley Grade Acid - Project 3076	New Earnings $28.8 M Potential Savings $71 M	TSD Objective B - 10 (c)

Coalescer for Phase II was successfully started up on 6/19. No major problems were encountered during start-up and operation. Operators drain organics from coalescer once per shift. A complete evaluation of the effect of the coalescer will be completed in July. Production of water white acid greater than 70,000 #/day was again demonstrated on a day-to-day basis with sewer bypass valve closed.

DSW 014044

HARTOLDMON0017935

HCl (Cont'd)

Muriatic Acid Storage	Savings $21,200	TSD Job No 497

Storage tank ready to be put into service. No acid has been sewered because of lack of storage since tank was completed.

Issue HCl Manufacturing Improvement Plan	Planning	TSD Objective B - 1 (b)

Rough draft reviewed by all interested plant groups on 6/27. MIP will be written in final draft for formal review by 7/31.

Reduce High Free Cl_2 in Muriatic Acid	Quality	TSD Job No. 950

Problem has been extensively analyzed but no clear cause nor corrective action determined. It has occurred intermittently, disappearing earlier in the month, but on 6/28 the free Cl_2 level began to rise again. A close check on Cl_2 emitted from each chlorinator is being made.

PNP O. J Norris, J. M. Jones, K. G. Hale (A. G. McCarty)

Debottleneck to 1.8 M #/mo.	Capacity Savings $27,500	TSD Objective B - 9 (a)

Reactor Process Control program still in effect. Department ran at standard rate of 1.8 M # for 31 day month. No serious letdown problems during month. Investigation of poor carbon tower cycles continues.

Revise PNP Manufacturing Improvement Plan	Planning	TSD Objective B - 1 (g)

The 1969 revision of the para-Nitrophenol MIP was reviewed by the Business Group. Final TPM approval for issue was given in June completing this objective on schedule.

NIRAN K. G. Hale, D. W. Dudley, T. W. Lawrence (A. G. McCarty)

Demonstrate Parathion Recovery	Savings $17,500 10-15% Reduced COD	TSD Objective B - 5 (a)

Project transmittal was forwarded to maintenance on 5/29. The transmittal was formally approved 6/10. The project premise was approved 6/6. Construction is underway, no EDC is immediately available.

DSW 014045

HARTOLDMON0017936

NIRAN (Cont'd)

Acetone Recovery	Savings $12,900 40-50% Reduction COD	TSD Objective B - 5 (i)

Acetone recovery tests atill being delayed by mechanical problems with ejectors Ejector from No. 4 condensation reactor is being moved to the No. 3 reactor so that tests can be completed. Tests will resume immediately after change. Drafting is scheduled to begin on final design for project 7/7.

Central Chlorine Unloading	Savings $21,000	TSD Objective B - 6 (a)

Construction of chlorine unloading facilities to be complete 7/18. Completion was delayed by delivery of special chlorine valves. Operator training has been postponed to the week before completion of construction. Safety audit was conducted 6/18.

Sulfur Recovery from Residue	$271,000/yr. Net Savings 40% Reduction in SO_2	TSD Objective B - 5 (d)

Engineering Flow Diagrams and Material Balances Flow Sheets are essentially complete and to be transmitted to CED the week of 7/7. A tentative date of the week of 7/21 has been selected for CED to review project details at Anniston.

PR&D work is complete. Change in process to run washes in basic media for mildest corrosion conditions looks good. Final PR&D Report is to be issued in July

Optimize Cl_2 and N_2 Levels	Savings $40,000	TSD Objective B - 5

Higher N_2 sparge was started on #2 system on 6/27. Higher N_2 sparge was started on #4 on 7/2 and Cl_2 level tests on #5 system will begin week of 7/7. Results will be evaluated on 7/14 and other changes will be made accordingly.

Methyl-Ethyl Alcohol Cross Contamination	Savings $3,200	TSD Job No. 918

Design packege prepared and filed for use when a change in PCT sales forecast warrants.

P_2S_5 Charge Valves	Safety Item	TSD Job No. 919

Work temporarily suspended. Production plans to review the situation with the Safety Committee.

DSM 014046

HARTOLDMON0017937

NIRAN (Cont'd)

Improve Chlorinator Cooling System	Savings $48,000/mo./0.5 hr Reduction in Chlorination Time	TSD Objective B - 5 (g)

Evaluation is continuing. CED heat transfer specialist feels different refrigerant may improve heat transfer somewhat, but if the maximum obtainable has not been reached the major problem is more likely operational or design.

Chlorinator Long Cycle Time	Savings $39,000/month	TSD Job No. 927 TSD Objective B - 5

Evaluation revealed that reduced heat transfer to jacket cooling medium is the major cause. Vessel history indicated that improvement would probably not be obtained by cleaning the jacket. Recommended changing out the vessel with a new in-plant spare. Total cost including downtime estimated $37,000; payout in less than 30 days on Methyl. Project premise approved. AFE being prepared.

ENGINEERING DESIGN AND SERVICES

Mechanical/Electrical/Instrument Design and Drafting	J. C. Price, J. A. Veaze R. V. Carlisle, R. L. Br J. K. Rennie, J. Childre (W. F. Taffee)

Flasking of mercury from the chlorine cell house was begun on 6/23/69. Completion expected in early July.

The target meters installed on an experimental expense portion of Santowax Still Control (AFE-3016 - $33 M) worked flawlessly for about three weeks - some plugging with solids encounted in the fourth week. Drafting has been completed on a piping revision that will include a bypass and blow down connection to eliminate the problem.

The engineering flow diagrams for the proposed Sulfur Recovery facility were completed and transferred to the Process Engineering Group for tansmittal to CED

Liaison work continues to be heavy on Dismantling and Removal of Chlorine Manufacturing Facilities at Anniston (AFR-3214).

Review drawings were completed for the following projects:

Well Water to Niran Jets (AFE-3292 - $14.1 M), Solid Aroclor Debottlenecking, Sulfur Recovery P & I, Pressure Control Valves for Fire Protection System (AFE-3211 - $5.0 M), Fire Pump Capacity Test Equipment (AFE-3227 - $4.1 M)

Construction drawings were completed for the following projects:

Parathion Recovery (AFE-3245 - $6.3 M), H_2S Alarm for Niran, Fire Alarm System (AFE-2575 - $2.9 M).

DSW 014047

HARTOLDMON0017938

UTILITIES ENGINEERING J C Price, L. O. Chambers, M L. Marcum (W F Taffee

Capacitor relocation was started up successfully on June 6. Alabama Power Company agreed to prorate KVA demand charges for June based on the demand before and after June 6. Savings from improve plant power factor were $500 in June and will accrue at $900/mo thereafter Manual treatment of biphenyl cooling tower was started late in June. Project 3282 - Install Test Heat Exchanger ($1.4 M) to monitor effectiveness of biphenyl cooling tower treatment was approved. Rough draft of AFE for use of Well Water at Niran Jets was forwarded for preliminary approval. Started final design of Steam and Water Meter Projects. Evaluation of plant equipment using gas, water, or steam was completed. Six projects with potential earnings of $40 M/year will be scheduled for further study as a result of this evaluation.

PLANT IMPROVEMENT G. C. Goodwin (W. F Taffee)

Unsubmitted portion and deferrable approved Plant Improvement projects for 1969 and 1970 were reviewed and majority of work deferred in line with Division profit improvement goal. Approved non-deferrable projects (primarily safety) will be completed in the third quarter. Plant Improvement effort will be held to 20% of one man to provide non-deferrable services. This will allow shifting more drafting effort to Cost Improvement.

AFE forwarded for surfacing fire lane to Benzene tank farm (AFE-3277 - $1000) Design packages forwarded for renovation of Niran process trenches (AFE-3125 - $3430). Forwarded for review "Protection of City Water Main at Snow Creek" (AFE-3088 - $8700).

Liaison with State of Alabama Highway Department continued on exact location of New Highway 202 across Monsanto property. Design work completed on fire water system alternate route to PNP department.

POLLUTION CONTROL E. G. Wright (W. F. Taffee)

Legislative Action	Community and Governmental Relations	TSD Objective F - 2

The Alabama State Legislature is working actively on an Air Pollution bill The bill presently in the legislature is a compromise on the original bill sponsored by the Associated Industries of Alabama. Bill introduced to change Alabama Water Improvement Commission representation from 6 to 1 industry member was scheduled by the committee and will probably be killed.

Complaints	Community and Governmental Relations	TSD Objective F -2

No air or water pollution complaints were received during June

HARTOLDMON0017939

PROCESS AND QUALITY ANALYSIS J. L. Murphree, Allen Hale (W. B. Dunlap)

Quality

The Plant Quality Score was 89.1 up 0.8 from May with a YTD score of 90.0 against a 1969 target of 95.0 minimum. Free chlorine in Muriatic has been brought into specifications. Aroclor 5460 solubility and Aroclor 1242 isomers show unfavorable trends.

PNP - Monitor of Critical Variables	Potential Savings $60,000	TSD Objective C - 3 TSD Job No. 879

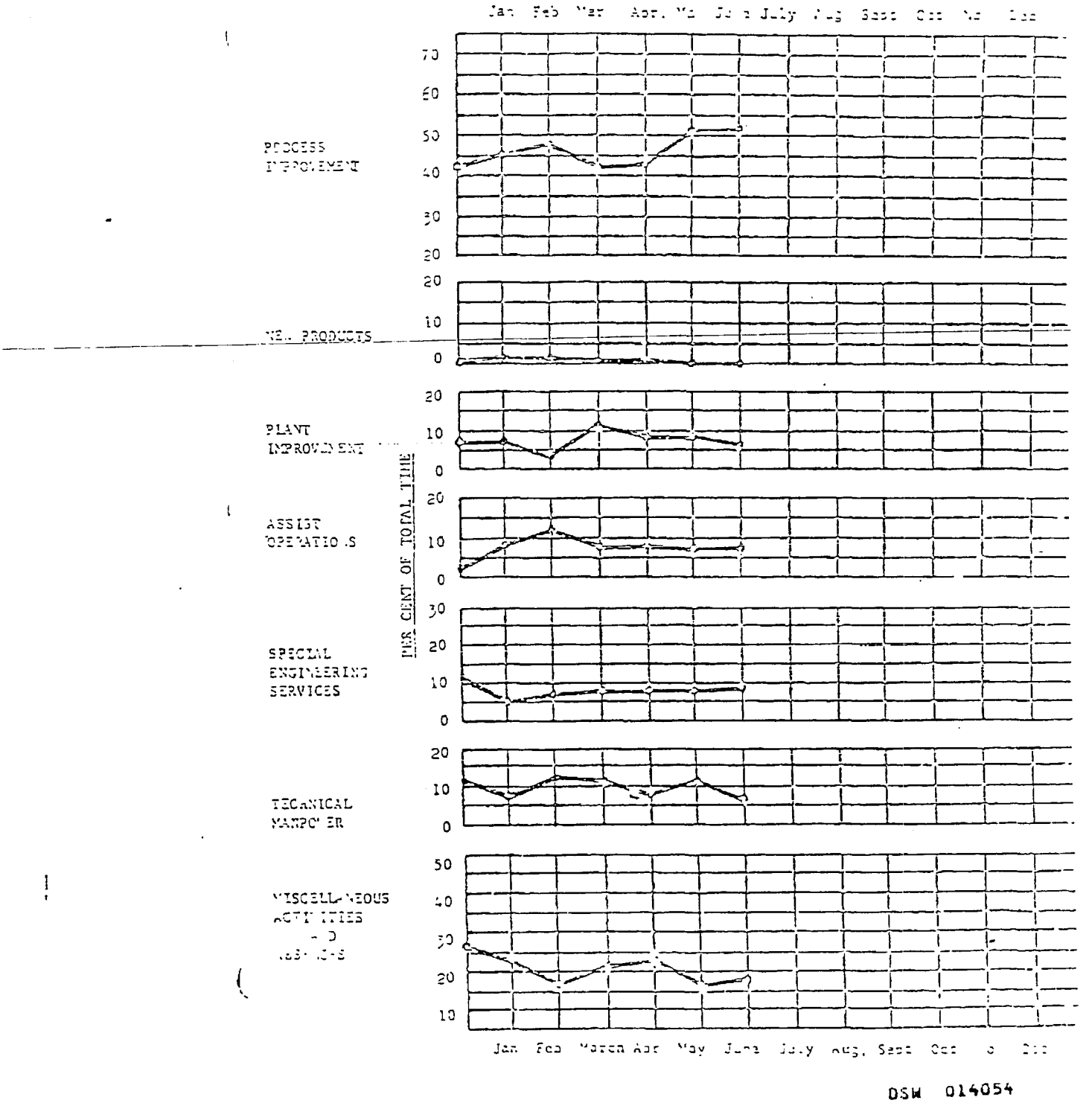
Solids cycle high and low, but the reactor depressurization control system has prevented pluggage and cycle times are on target. A strong correlation has been found between individual batch yields and carbon towers in regeneration.

Manpower

Allen Hale joined the P&QA group as a summer employe.

HARTOLDMON0017940

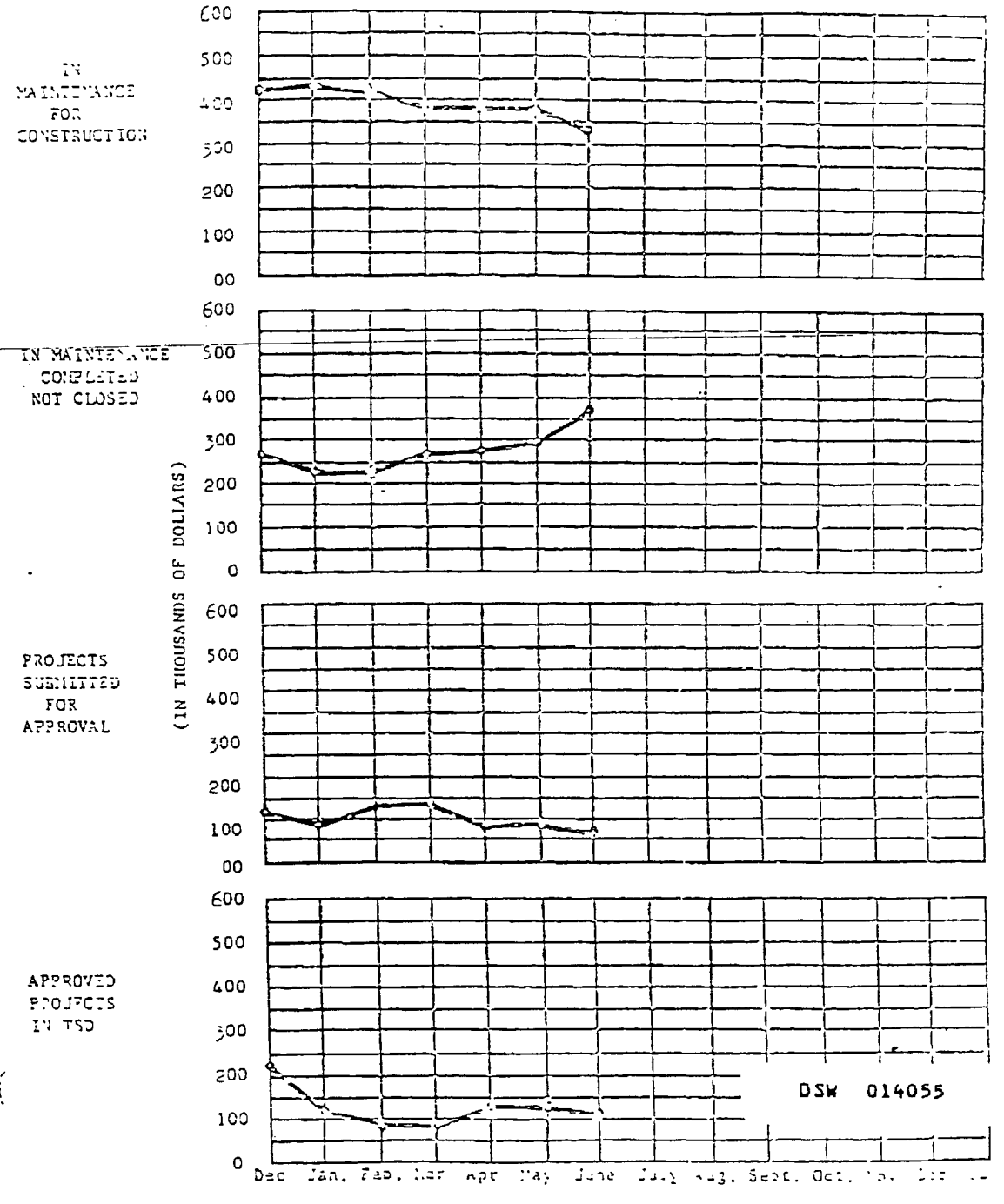
DISTRIBUTION OF TIME BY TECHNICAL SECTION



DSW 014054

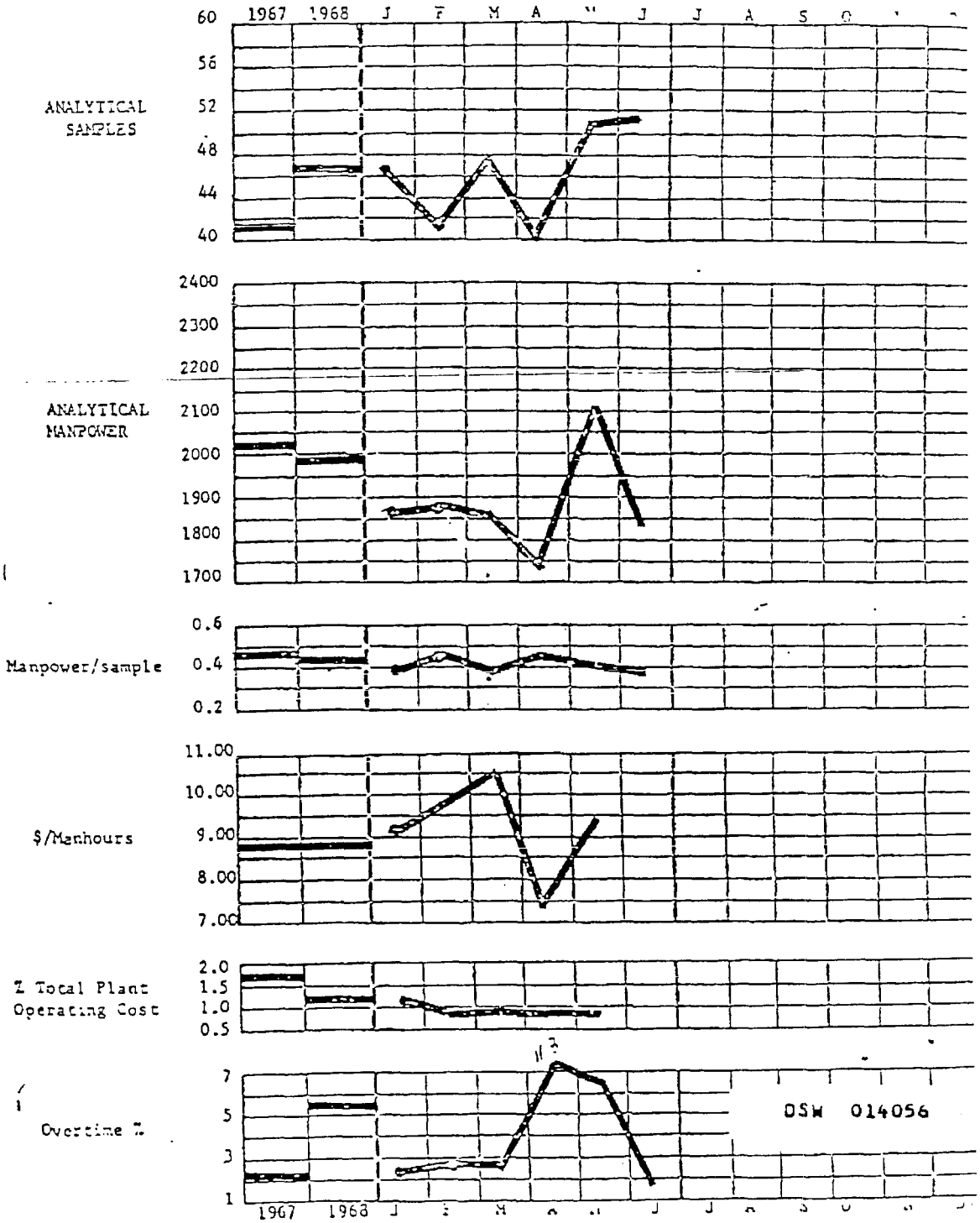
HARTOLDMON0017941

TSD PROJECT SUMMARY



HARTOLDMON0017942

LABORATORY ACTIVITIES



OSW 014056

HARTOLDMON0017943