

2/91

Forage Monitoring - id ly ava Try to be representative
at location by season / gross stage
over time
gross
nutritional
soil
water level

Livestock Management Tool
Production Indexes - to locate operational problems
Nutrient Distribution - to locate problems
Body Condition Scores - to locate reproduction nutritional problems
Production Targets - monitoring
good lifestyle herd dollars

Sobering and Productivity
Nutrition of animals
for their good condition
for reproduction success B.C. S. etc.
its requirement
age, size, milk yield, condition
temp., production stage, climate

Nutritional content
Intake
digestibility - maturity of forage
Supplementation - when, how much.

2/
Frequency of defoliation - over a season can plant
rebuild carbohydrate reserves
Intensity - how much is taken from plant
better stand if leave 1/2 of stage by weight
rather than cutting to ground.
Opportunity - time exposed to utilization
pasture

Pasture
monitoring

Start with nutritional goals
at stages of season
growth

Gross
cycle
Plant development
3 stages

3/
Animals select what they want and particularly
return to most nutritious plants - ice-cream
plants that have been grazed earlier
Frequency of return - develops patches of newer and in
renewed by rain - less nutritious

Notes

Solar energy true source of wealth - so farage growth/mgmt is key
apply ecological principals for sustainability.

Tools - managerial accounting
- reproduction

Most ranches are efficient [but 1/2 will go under]

Don't focus on operational details - look at strategic decisions
Don't deal with each factor separately - think interrelated
look at ranch as whole.

Gross margin - gross revenue less direct cost to get
contribution of each animal to overhead.
This is enterprise

Enterprise gross margin is e.g. gross rev - e. direct cost.
e gross rev adj for inventory changes.

Gross margins allow comparison of operations - hobbyist vs living
diagnostic measure tool for financial efficiency

Profit - when total of enterprise gross margins exceeds
total of other overhead expenses

Maddox article - price equals average cost of production
survival depends on keeping cost of production below
average price - There is space

But - 1/2 will not survive.

If apply to stock market
Stock market
1/2 lose money
inflation makes it
look good.
That means pension plans
401K's etc.

Chap 2

To survive - must be feasible, profitable
positive cash flow, control debt, consider risk
in finance and operations

Indicates feasibility

Profitability - use accrual - not cash accounting
if sum of all enterprise g.m. exceeds overhead
then profit

accrual - reflects changes in inventory value
[can also include other factors] feed store
keffers.

p8.

Sales + inventory changes - purchases = Gross Rev.
\$48,05 - 2000 - pur 13000

wet land
main cash flow
accrual time
flexible time
operate on
capital gains
- Main
look keeping
balanced.
- No over
tax work
- Do our health
repair
where poss.
- Does or
more do
worse

Call: deliver for purchase at price
Put: able to purchase at price

p8 Seed raised is direct expense, separate enterprises transfer values between accurately
Improving enterprise gross margins is one of three ways to improve profit.

p11 Reproduction
Animal is unit of production - marketed by weight class and sold by pound.

p12 Managing reproduction is managing nutrition

Reproduced in same for forage
moderate competition must stand or gain

p18 Genetics - raw materials soil, water, sunlight
forage is primary product - animal converts
Life function of energy flow [go with the flow - force downwards]
Survival depends on creating net positive flow of energy
Cash flows with energy.

19 If problem meeting nutritional requirements - selected wrong animal to raise or wrong place to ranch
Genetics - blue print for level of production that (size, milk, growth rate, fertility) that allows that [kind] of animal to continue producing year after year without constantly requiring additional costly inputs

Same for house design
needs break the cycle
Beaver
Deer
mushroom

- what feed resources - and what level of productivity can it support
- How much labor and machinery do you want to [input] to support animals year after year.
Feed resources - your forage. Then neighbors then consider climate requirements.
as labor and machinery increases - profitability declines

\$200,000 gross income on 5 acres from cattle

Prosperity in ranching depends on creating positive energy flow

p 31

Politicization in Europe - Central environment
affirmation of goods
Central

p 28

Strategy - study of relationships between
organization and their environment.

p21

Nutrition - for ruminant
partly in the dead bugs that are digested
for protein

Source of energy - 1) carbohydrates and sugar.
2) fiber cellulose - hemicellulose.

Broken down in rumen. to produce fatty acids
Managing nutrition means managing forage digesters
maintain the microbes.

22 Feed when standing not possible - then help face
with concentrate

Forage is cheaper - [Key for Smith's advantage]

22 Substitution more costly - needed when supplement of
results in partial replacement of standing forage

- 1) pound for pound replacement
- 2) reduce - change - rumen's ability to digest
as with too much concentrate
- 3) change - grazing behavior - animals stand around
waiting for hand out.

x Total wealth generated at primary level - forage

Hay - conserved feed is expensive

Considerations - what to feed microbes

Should only need mineral supplementation

As forage quality decreases - [less crude protein]

Need 7% crude protein in forage - even up to 10-12%

If have crude protein supplement - get better
efficiency in rumen for winter range forage
enhances ruminant's ability to digest forage

Energy (not protein supplements) only in extreme cold.

Hay during winter and grain during drought - Bad costly

Evaluate your forage - then match animal to your
forage resource available

why not allow
rumen organisms
Termites
wood chips
break down
lignin

point don't mix
- use ruminants
then changing diet

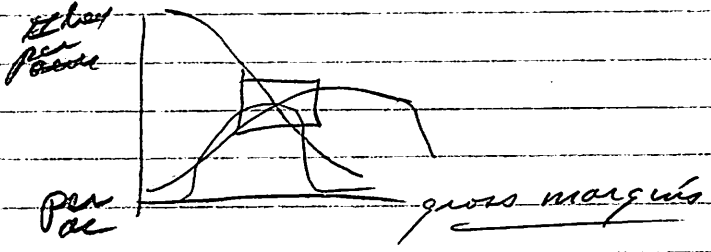
Empirement

Truck cattle
down country



Journal
production

Reasonable Numbers of Stocking Pairs



Habitat
Creek
Sage

Teach back

8:30 or

Paul Revere
Panic

Dean

David may
gait
performance
occur

Read Money 31-1992

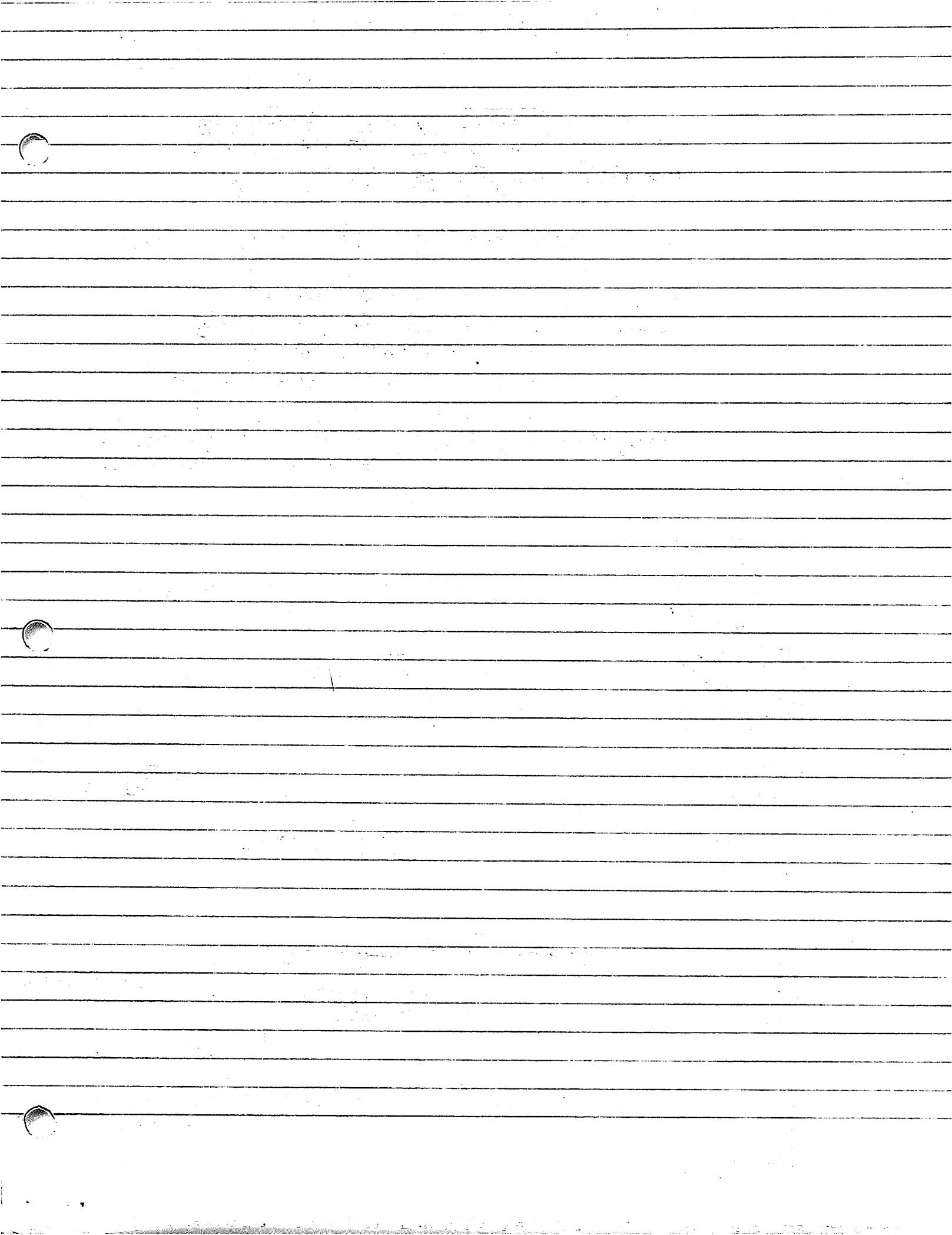
group
gathering
return

9

- How the Revere works
- How gross grows quantity quality and maturity
- The PLS article
 - why is it average good enough in present day world business
- Ranches less than 100 - 100-300 - 300+ cows.
Ten likely to exist

Revere - Guber 7/8 digesting files

4/5 of starch to kick over revere
can supplement pasture
but not starch corn



Doornik
Doornik

Cyber
Nick Warkent

for doing this
DI marketing

in brand management

operated all cover average cost

control market

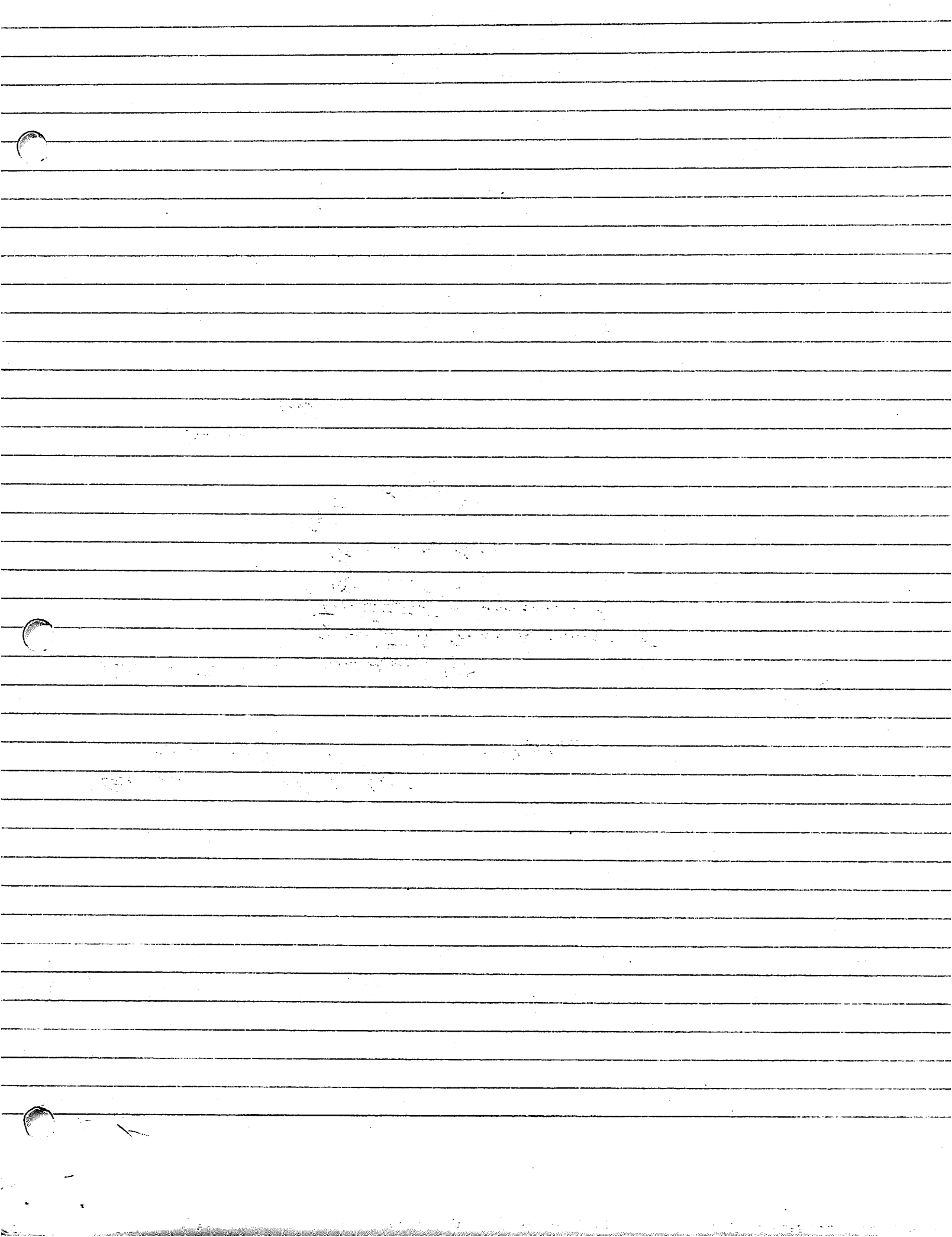
see Pitt

Scyva cell

Green - shek high

Ligson

average cost
↑



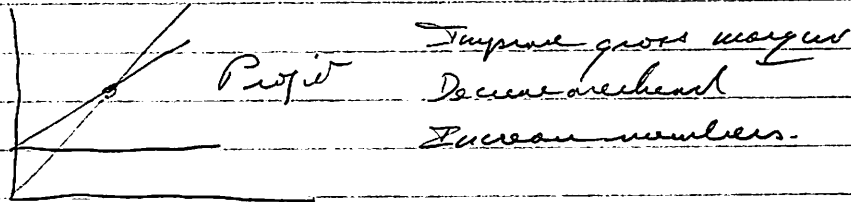
Tools Gross Margin

Cash Flow

Income Balance Statement

True Profit:

overhead / Direct
Cost:



Give my analysis

Start with inventory

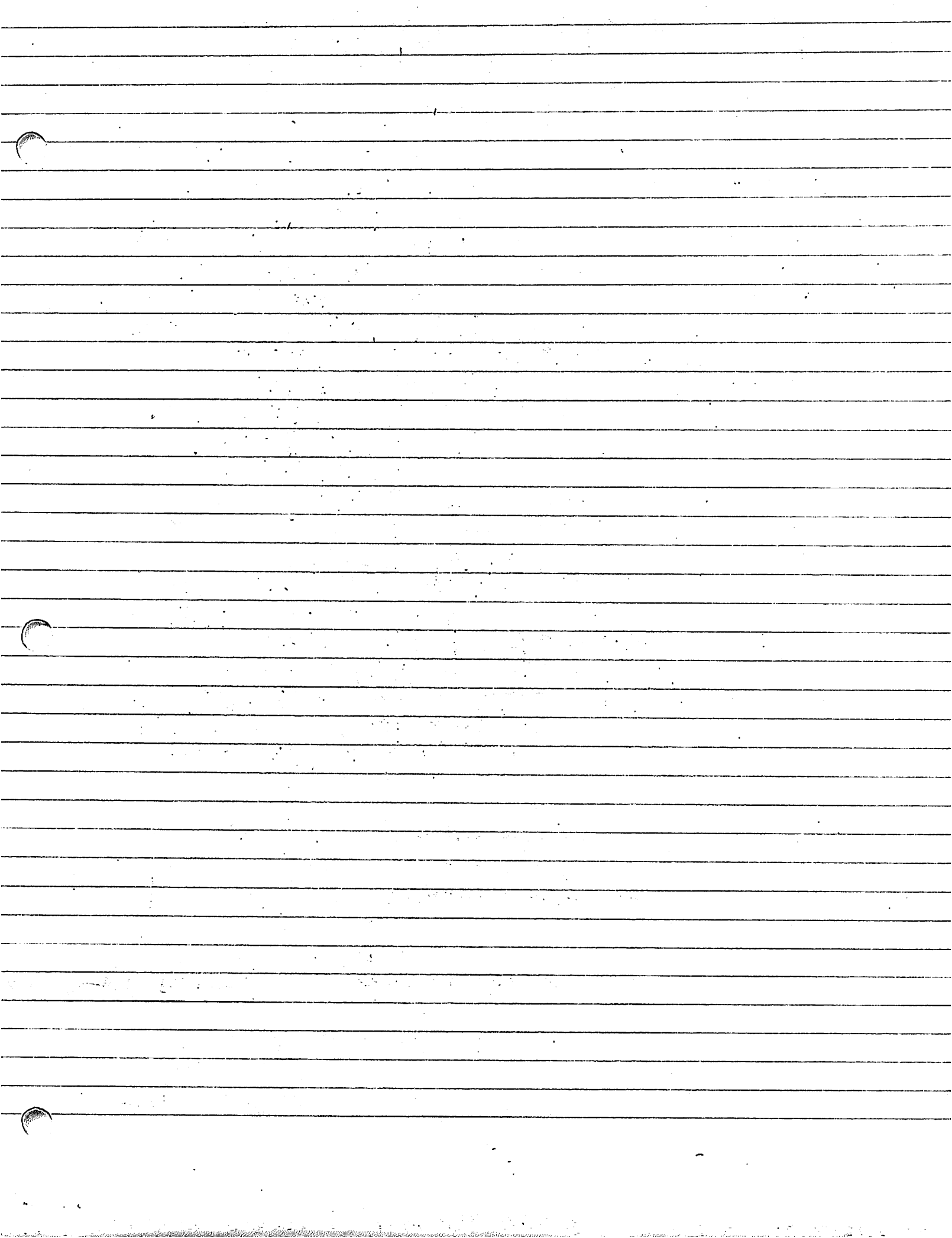
Conservative values for inventory.

Purchases are not produced here

Purchase of cover. Take depreciation at
one cent

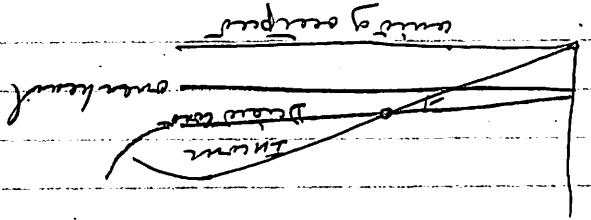
6,000.

Page 10 - 11

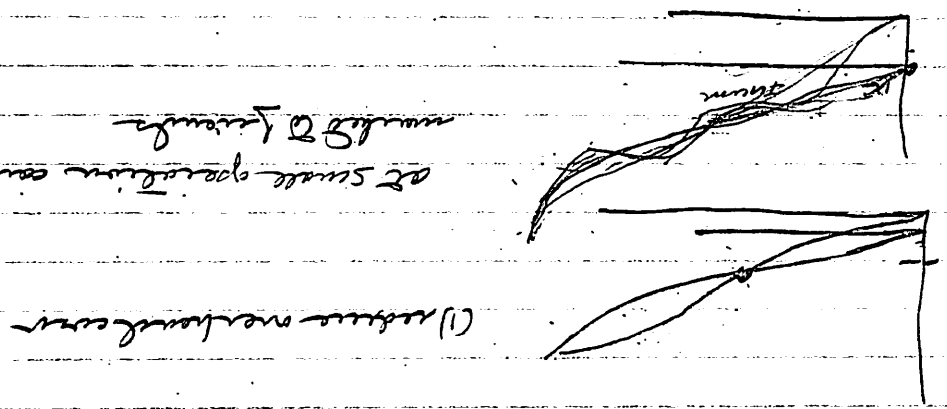


300 - 400	68.00 cost	272	> 78	Jan 100/165
400 - 500	69.00 cost	345	> 95	Jan 100/165
500 - 600	65.00 cost	390		

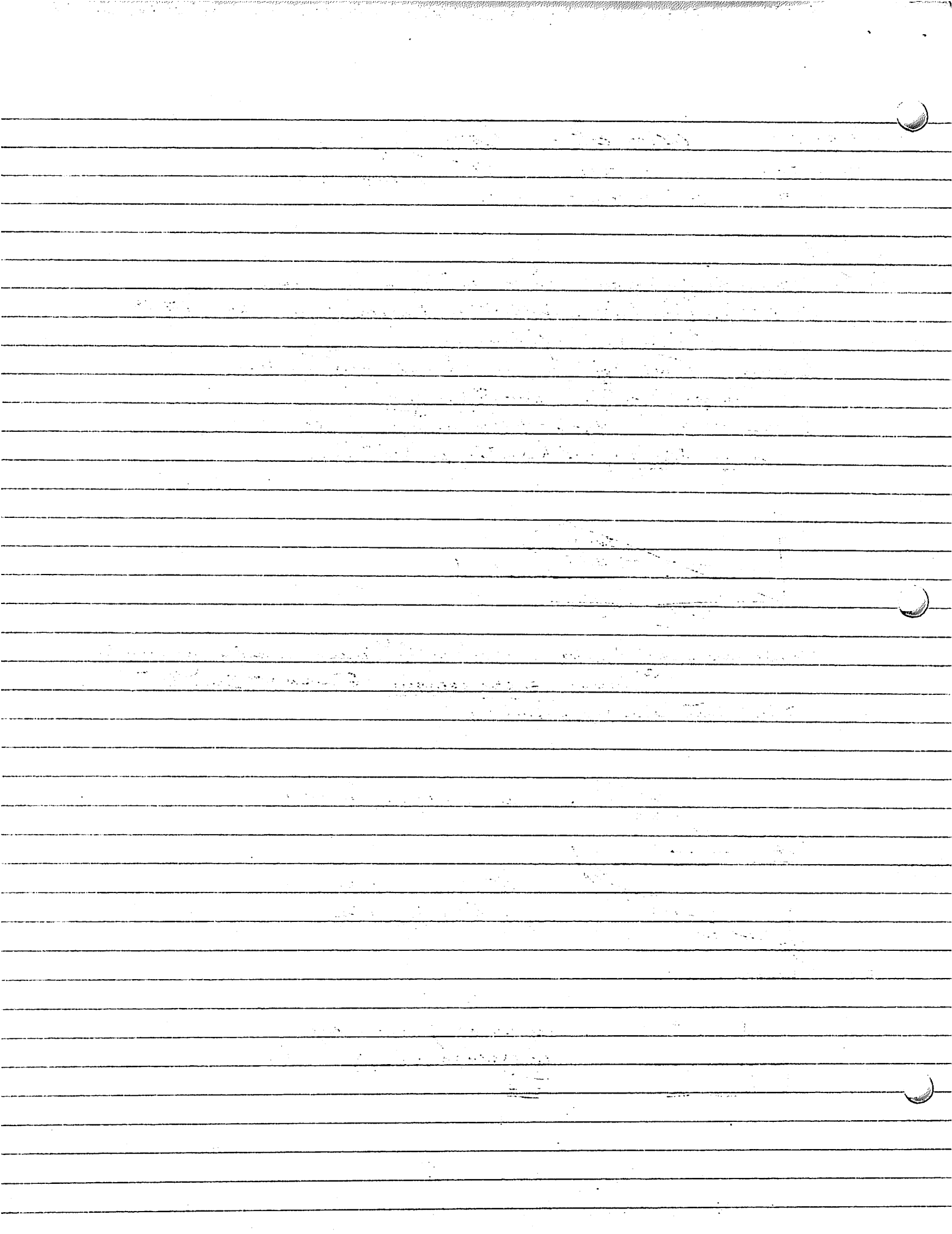
1) Contribution Margin Analysis - contribution margin analysis
 Direct and variable costs separate from other activity
 given a fixed input/output decision
 because overhead costs remain constant you have less
 managerial control - except for labor
 from margin analysis - for management of cost that
 may directly contribute to production.



To increase profit:
 (1) reduce variable cost
 (2) increase production unit
 (3) increase price
 increase price - Direct Cost
 increase price - Direct Cost
 Direct cost is proportional.

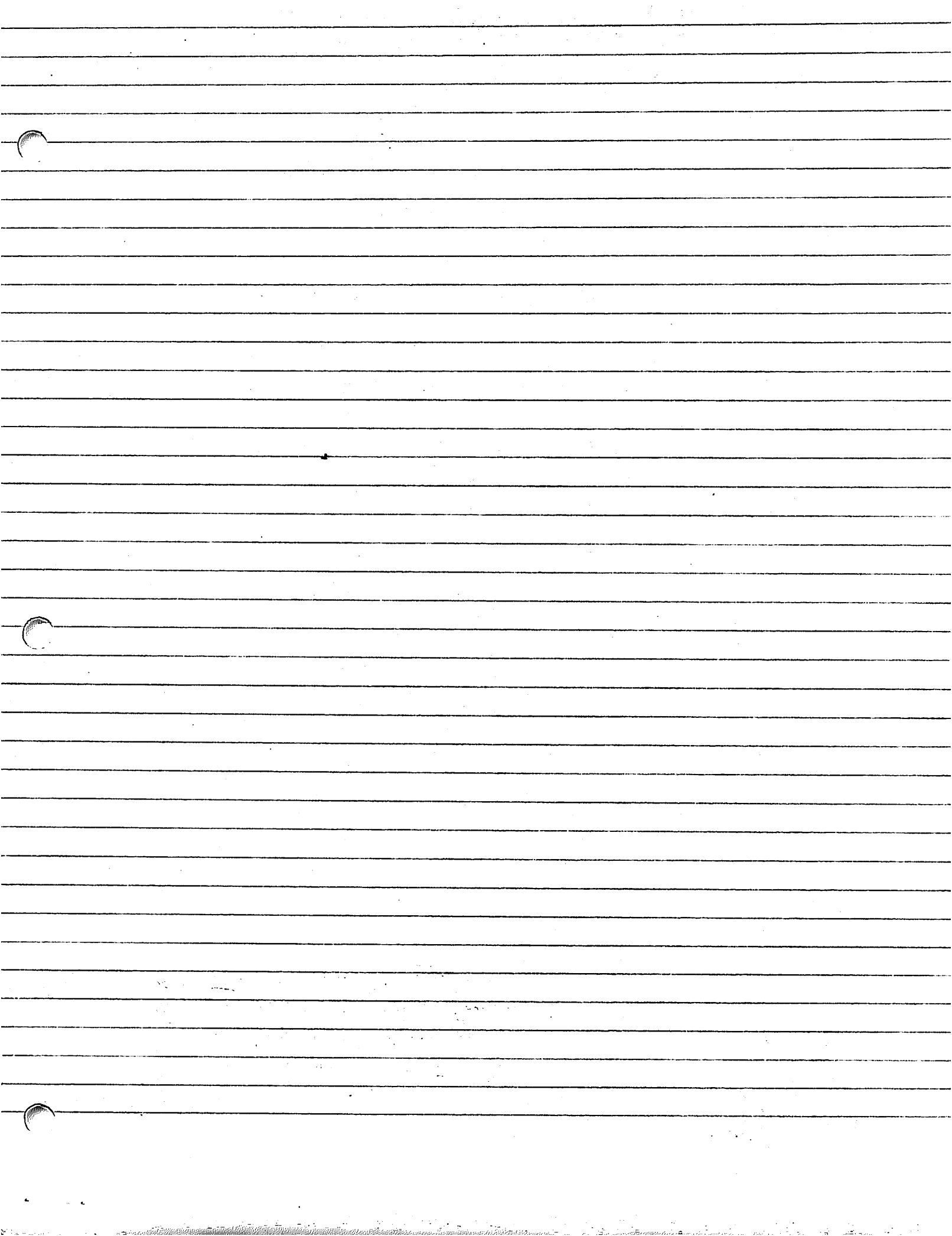


(1) reduce overhead cost
 at same operation can
 number of hours
 increase price margin
 increase activity level
 DB

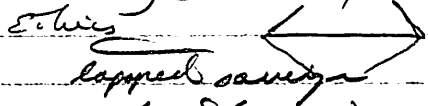


Gar
part
with
the
high

- ② Hill & Atlantic - Trillion
- ② Mid High made decision
- ② Mid High - More effort than worth
- ② Time has not mature



Energy flow - food living dead



Bottle - Non-Bottle, Desert

Bottle - desert unreliable precipitation

Non-Bottle - can save handles impact

More productive

More reliable

atmospheric moisture - Non-B - fast decay

Non-B - succession fast store in B

Best Non-B - goes to complex and stability

Overgrazing - Non-B get triggered

Grazing - practices - non-Bottle save.

Succession - base ground to creaks - to desirable to woody.

Very plant

See back - light sticking

Cost annual not used

Landscape description - place on successional change.

Soil surface management - is

How water you can get into soil.

Moisture cycle = grass better than hay hay takes away nutrient

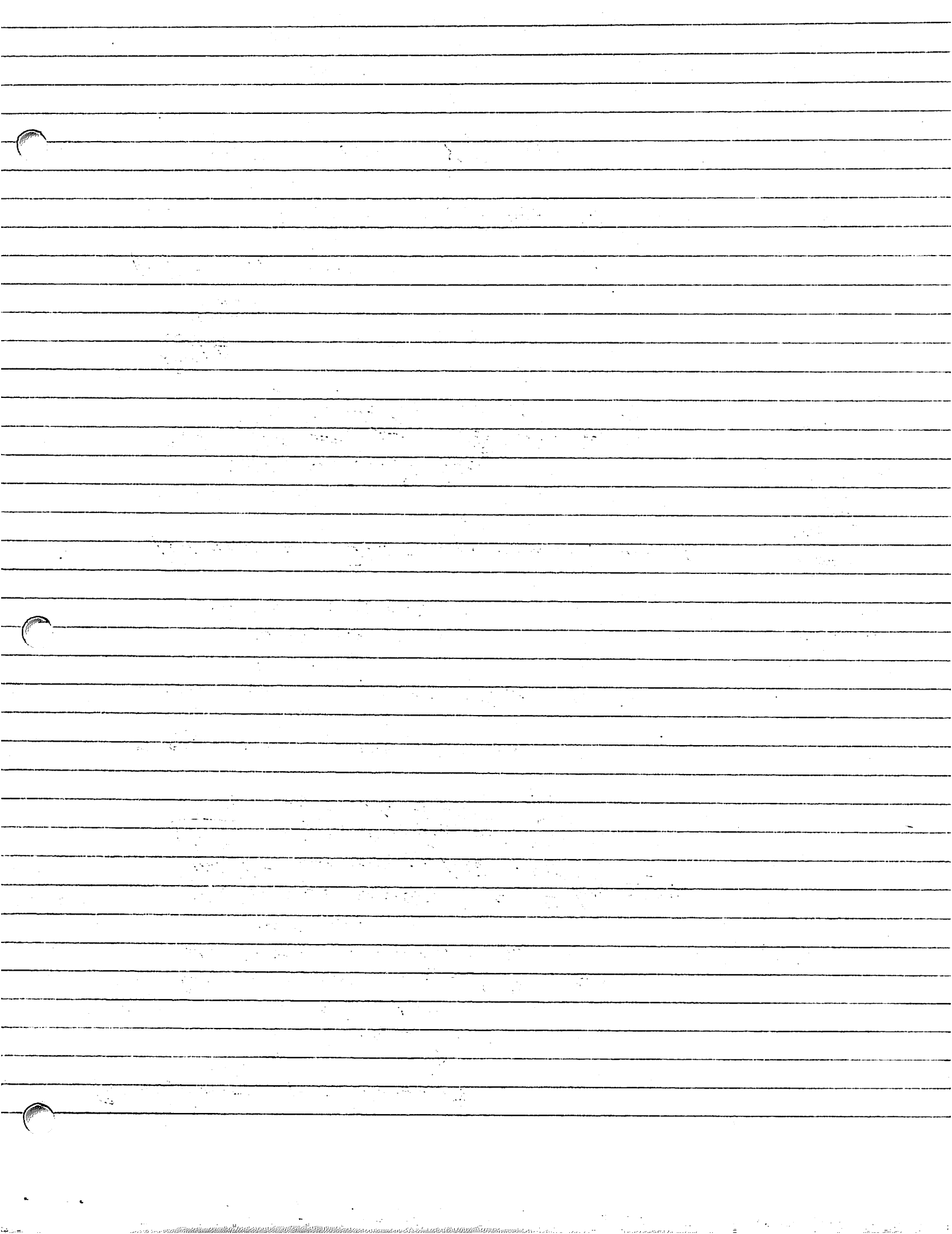
great at to run min the level average and gain it advance

Energy
Water
Succession
Nutrient

F + O Principal

Frequency Intensity Open to Regress

Control Wgt - capture of factors



catches drift
stress in short periods

vary timing of cutting give planned a break
 3 204

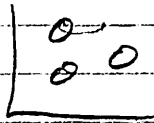
altering timing based on growth cycle of plants.

and half leach half - by rotational
load surface

leaves growing

2/6 to follow cable

Continuous grazing - list of Doehis note



pressure for lower stocking

max animal performance -

plants there - and animal select

load for plants - takes pasture down

slowly

Best gain with least mgd possible.

1 cow
 100 acres

12 AUM
 365 AUMs

Stocking is animals and time

365 dy

Stock Density 1/100

Grazing Pressure 365 No rest period, 0

12 AUM

12 AUM

100/365

1/365

1/25 acres

Grazing Pressure 1

Rest
 365

Types of Cows

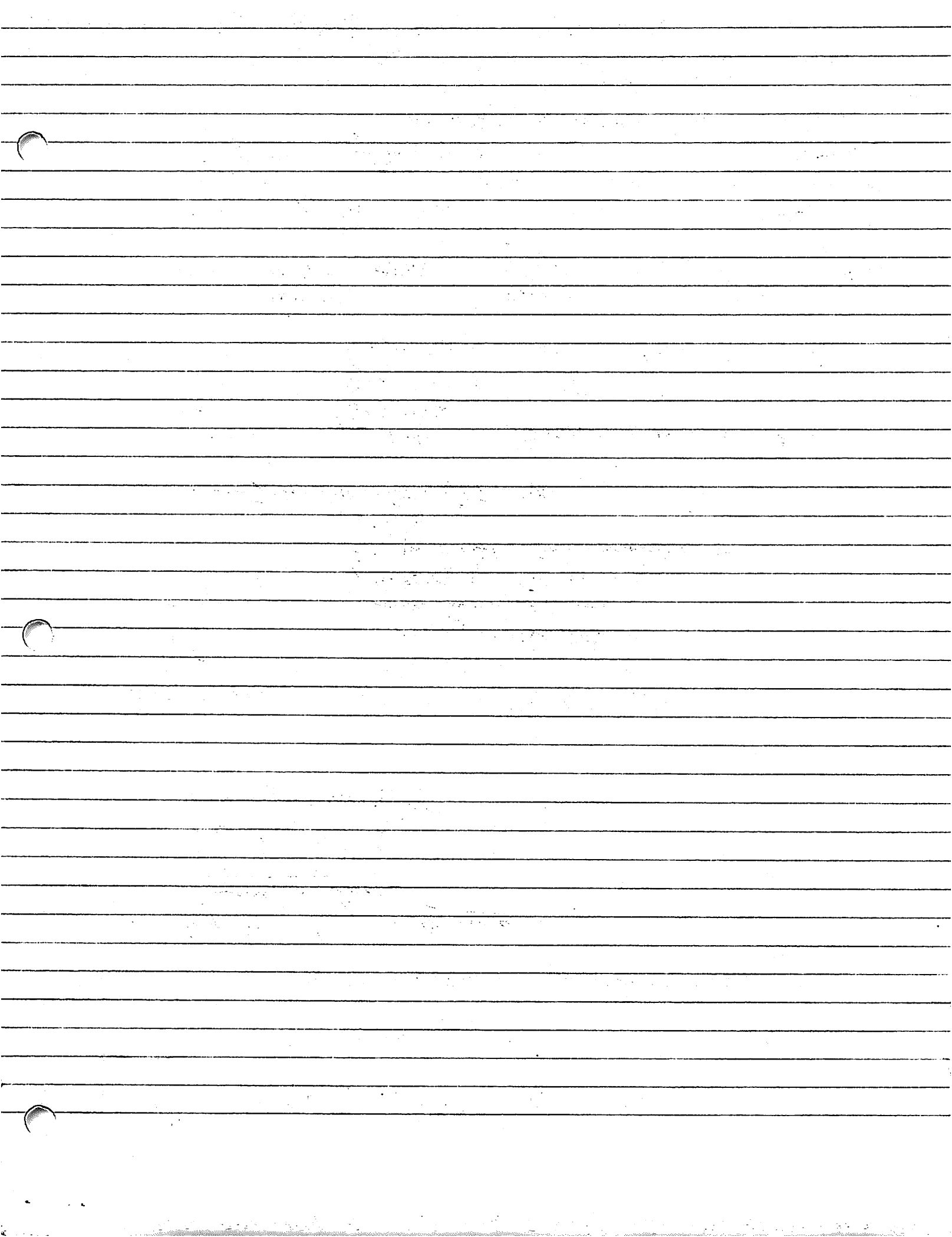
Balance

Control Time

Control Season

Control Pasture Requirement

TTC



250 days

50000
÷ 200

10. 250 lbs per day needed

10000
x 0.02 feed program

10000 lbs
x 100 days
= 1,000,000 lbs
Total feed = 1,000,000 lbs

1500

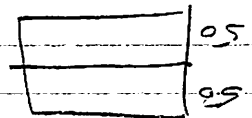
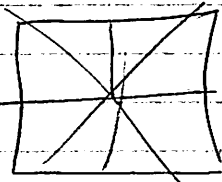
Cost

Based on 16 percent stage
or adjust to actual feed

Year 6 -

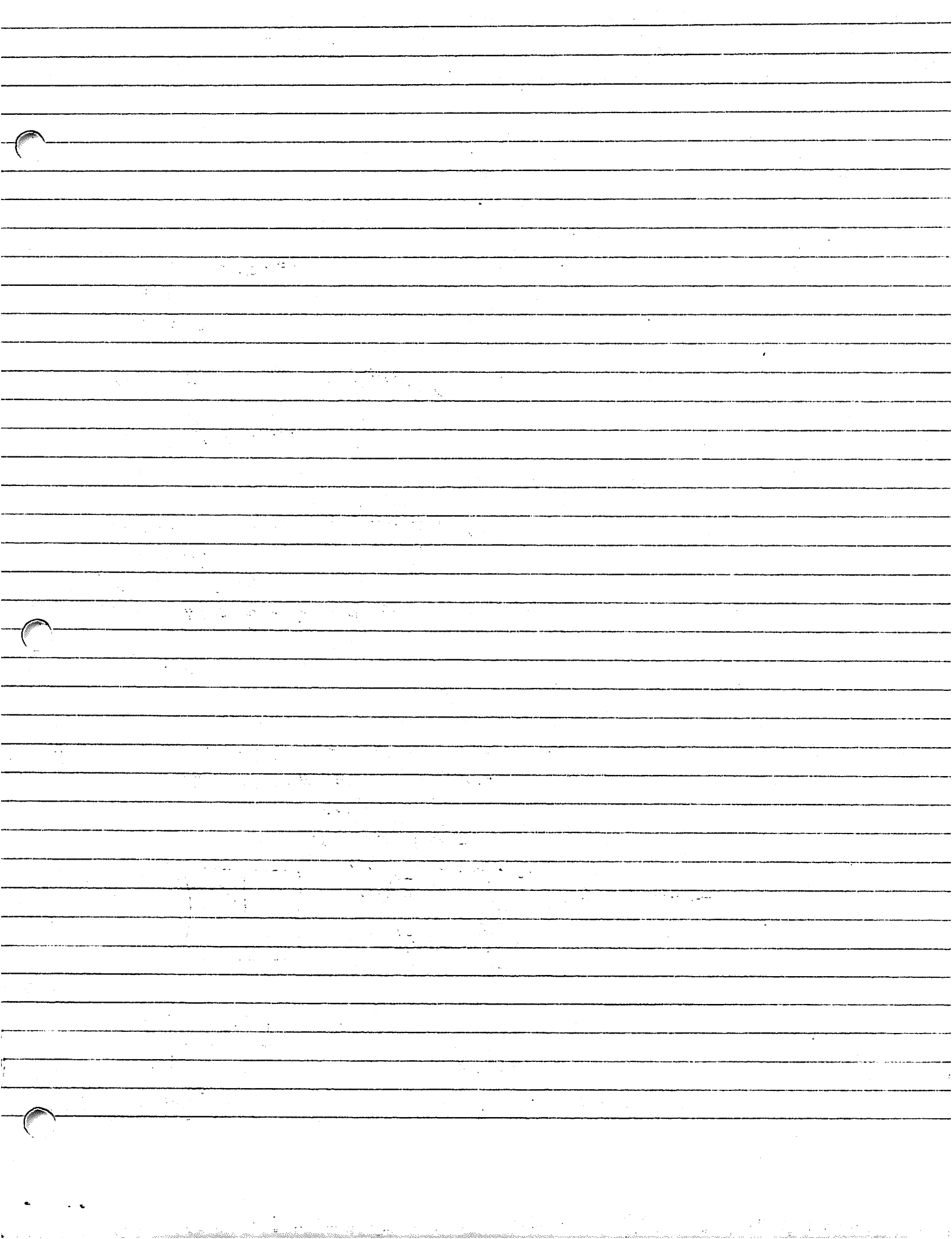
6 44 tons

gross weight 121 88
single portion
used amount
help plan



100 day program





1316.22

877.5

1053000.

19. August

55421.05

151.8

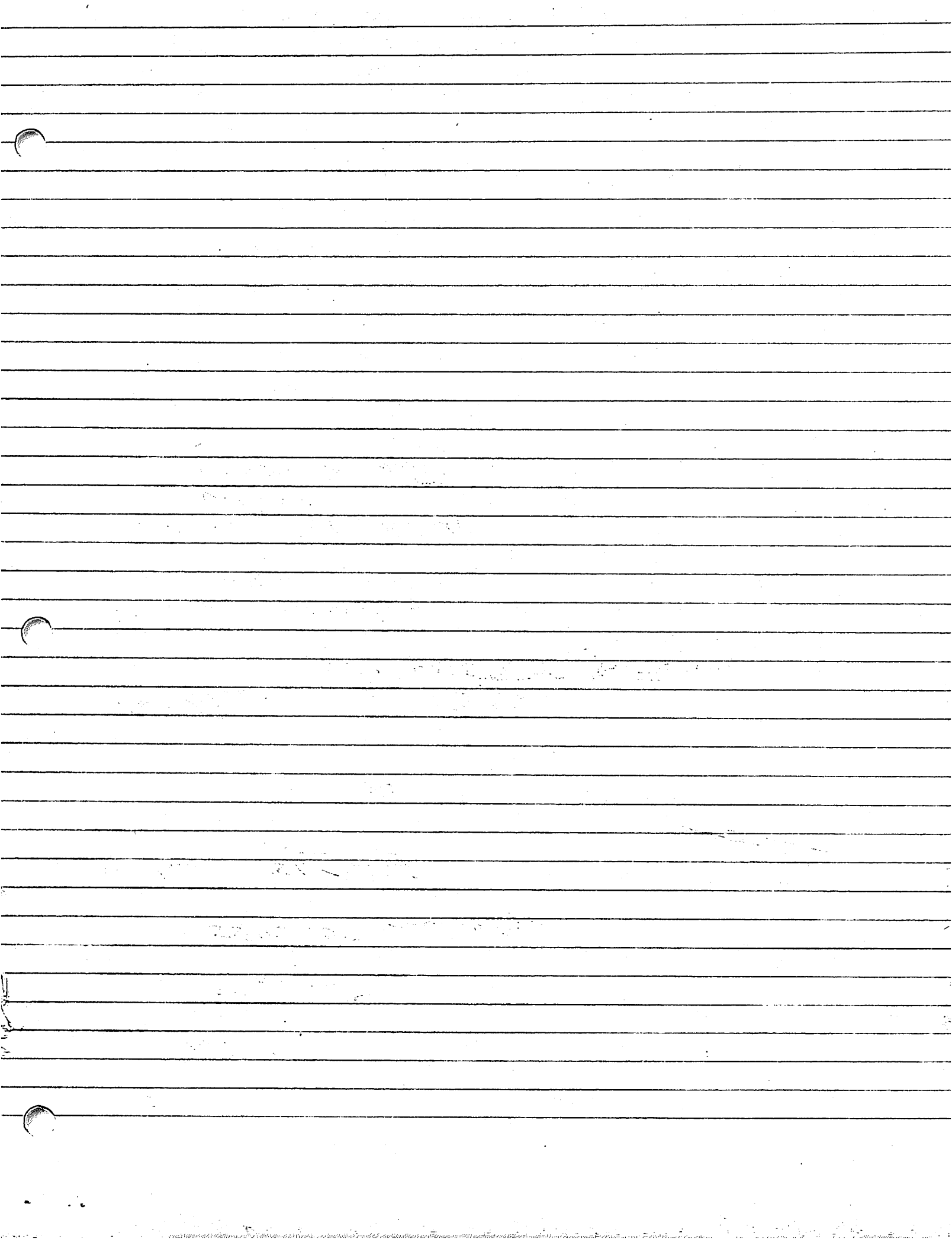
810

Geo. Amara - for half day
paid in stock for the points

Frank's account description
as of 8/16/05

4 Weeks Salt Brack
in/brack

Yves's organization -



60-8016

8/2

cutlass
newly identified
late September

Western
group

Survey TAN
annual P24

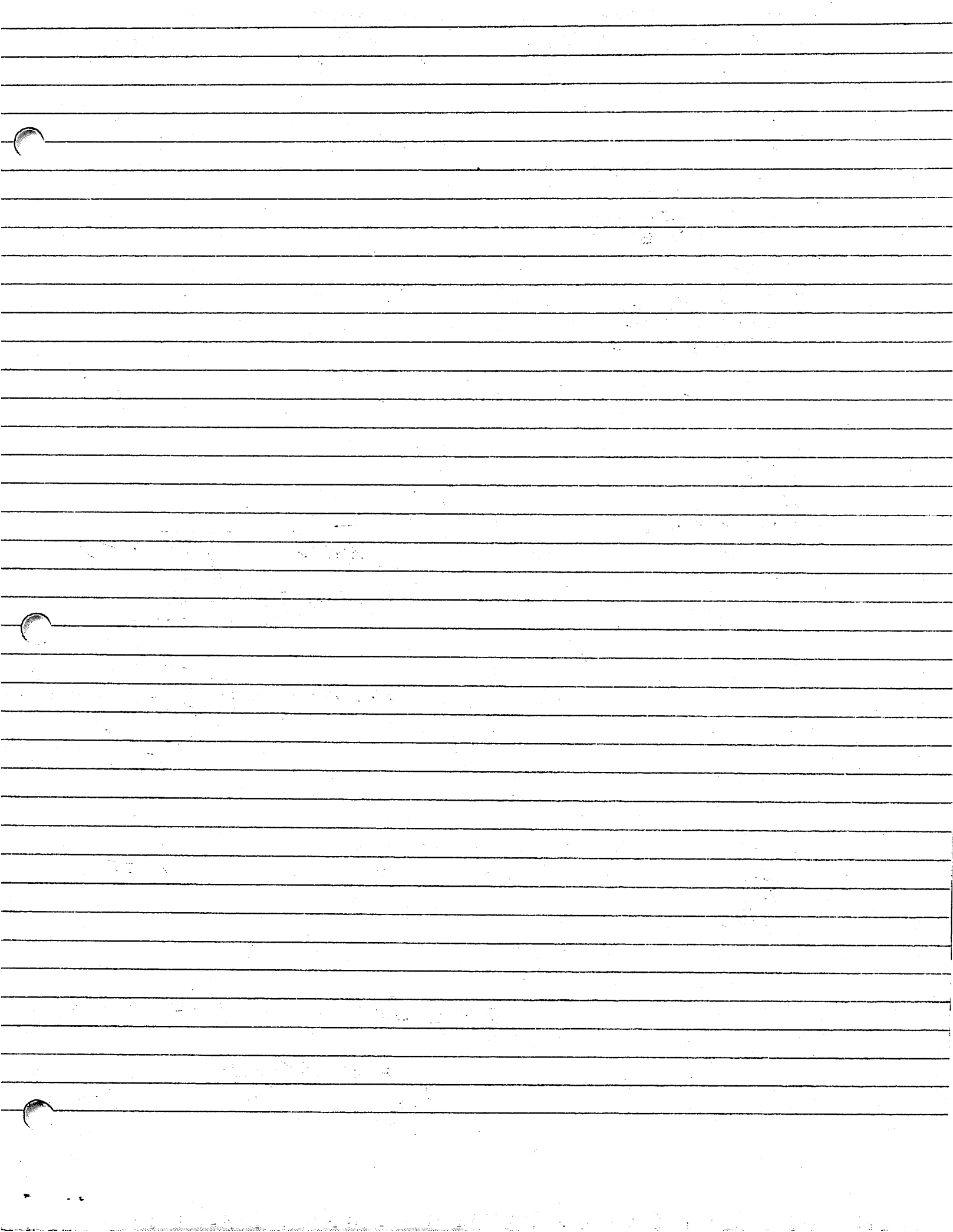
P27 Strategies

23.1
2
1.00
09
13.2

Holler
Hoyne

$$2016 \times .8\% CP = 1.6$$

1200 lbs normally 2.6 CP
20 lbs gain at 8%



People Goals

Vision -

Values - Honesty, Integrity

Need shared vision -

Need to talk

visualize what is wanted

Values generous

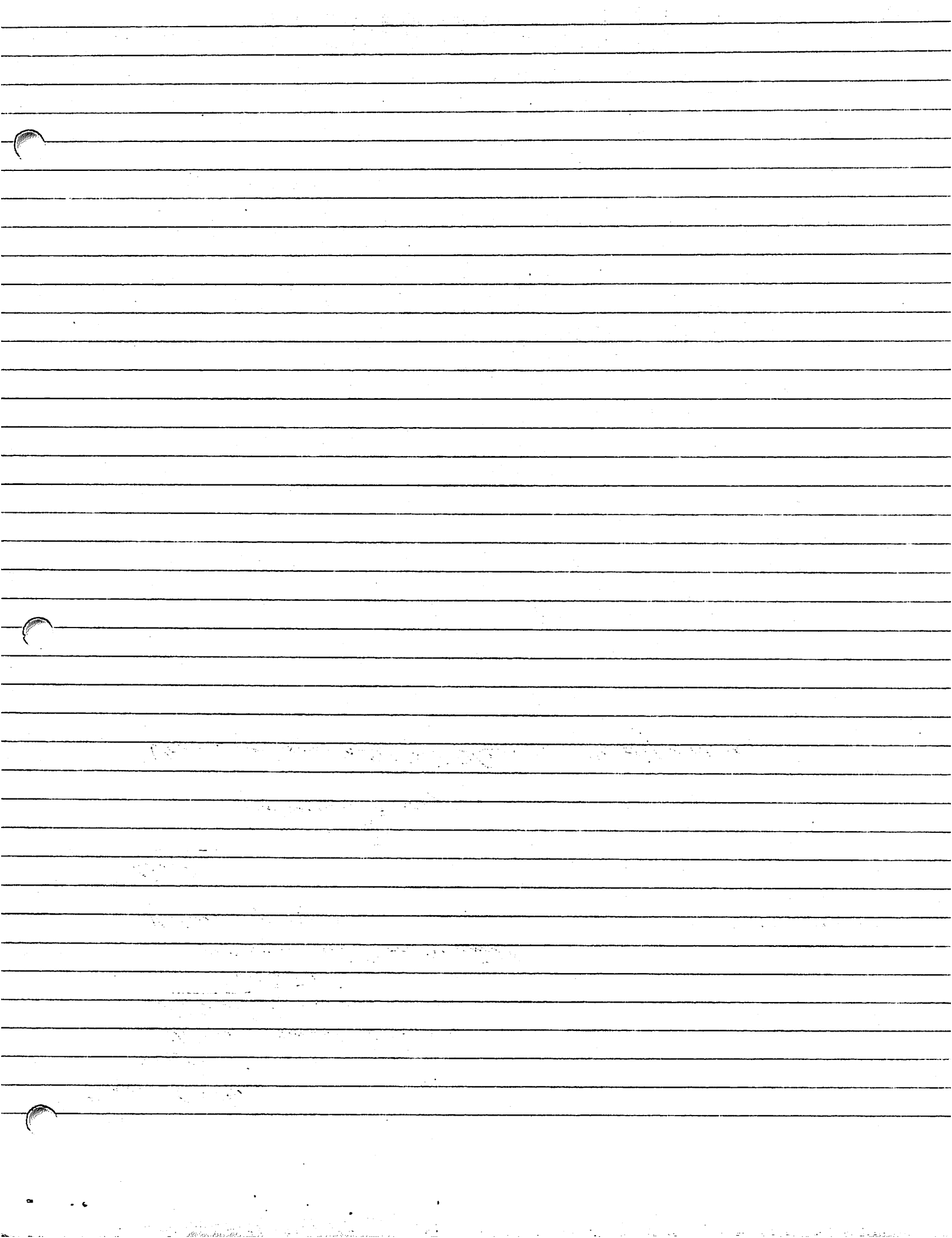
operations & m

Housework

Goals

good health
financial strength

Vision be same although there with dif values



1) **Forecast**
 Gross Margin - Gross Rev - Debt
 Cash & Debt
 Balance Sheet

Profit
 Assets -

Equity - Long Term Debt, current assets

Equity - 20%

Investing - Dividends & Loans - SCS

F I O

Monitoring

Financial Mgt

Body Condition

Health / Nutrition - Current

Stocking Rate Performance

Production Index

Current / Peak Value

1) Feed Intake / Energy

2) Program of diet trials

3) Trial & grazing strategy -
 Program of diet trials
 Intensity
 Opportunity
 - Evaluate average response
 in past management
 program of diet
 related production
 practice on nutrition

1) P.S. Goal - management response
 month
 Composites practice

3) High nutrition

Current Trend of programs - The choice

1. The first part of the document is a list of names.

2. The second part is a list of dates.

3. The third part is a list of locations.

4. The fourth part is a list of events.

5. The fifth part is a list of people.

6. The sixth part is a list of things.

7. The seventh part is a list of places.

8. The eighth part is a list of times.

9. The ninth part is a list of names.

10. The tenth part is a list of dates.

11. The eleventh part is a list of locations.

12. The twelfth part is a list of events.

13. The thirteenth part is a list of people.

14. The fourteenth part is a list of things.

15. The fifteenth part is a list of places.

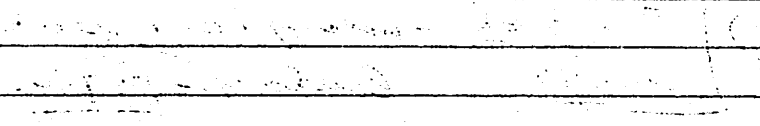
16. The sixteenth part is a list of times.

17. The seventeenth part is a list of names.

18. The eighteenth part is a list of dates.

19. The nineteenth part is a list of locations.

20. The twentieth part is a list of events.



21. The twenty-first part is a list of people.

22. The twenty-second part is a list of things.

23. The twenty-third part is a list of places.

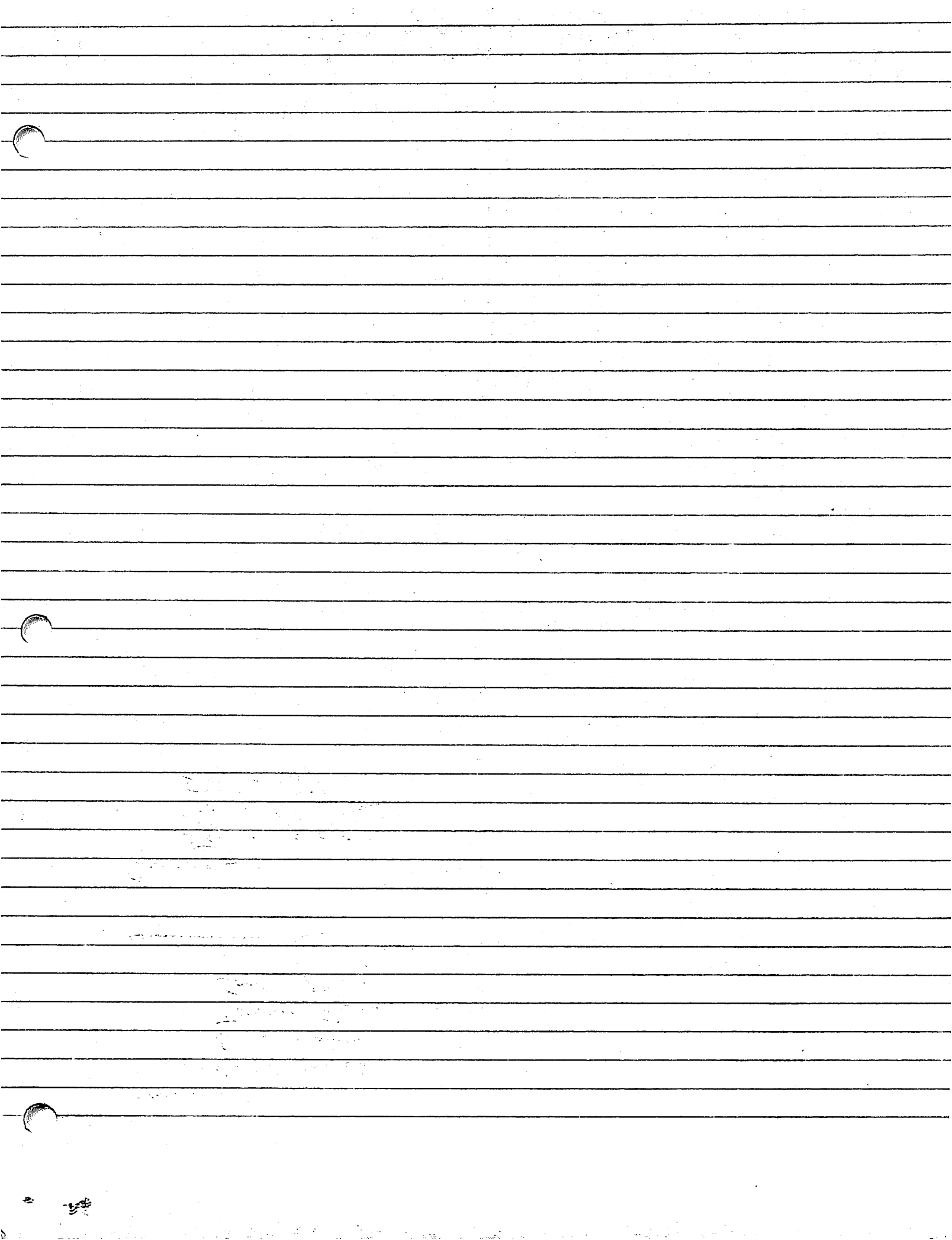
24. The twenty-fourth part is a list of times.

25. The twenty-fifth part is a list of names.

26. The twenty-sixth part is a list of dates.

Succent -
stay with people
Concentrate on
Soe good with

Financed
Green Margin -
Borrow Slud -
Income Slain
Cost - Flow



Gather grass on hill - turn into product
 Balanced Mgt - forage, animal, financial.
 Keep balance -

Gary Mosler
 Dean Blackwell

Weak link - short term goals - long range plans.
 Resource Mgt Associates - consulting.

Jerry Brown

Three levels of Mgt

Strategic - what animals, send over
 3 or 4 major decisions

Operational level - get cows fed daily

Tactical - yearly.

Balanced
 - forage
 - ranch
 - Dues
 - Land
 - water
 - Cattle
 - Considering
 - new
 - animals

Components - animal, forage, \$, people.

See the seamstress picture - interaction makes
 success. interaction of components must work



Alan Swartz - Hog -

Tracy Brock
 forage -

Unique

Taryall
 F. W. C. W.

Solve Taryall,

Backhoe (well)

16 head 1 head

Marked to paint

2 row 16 head

Mary

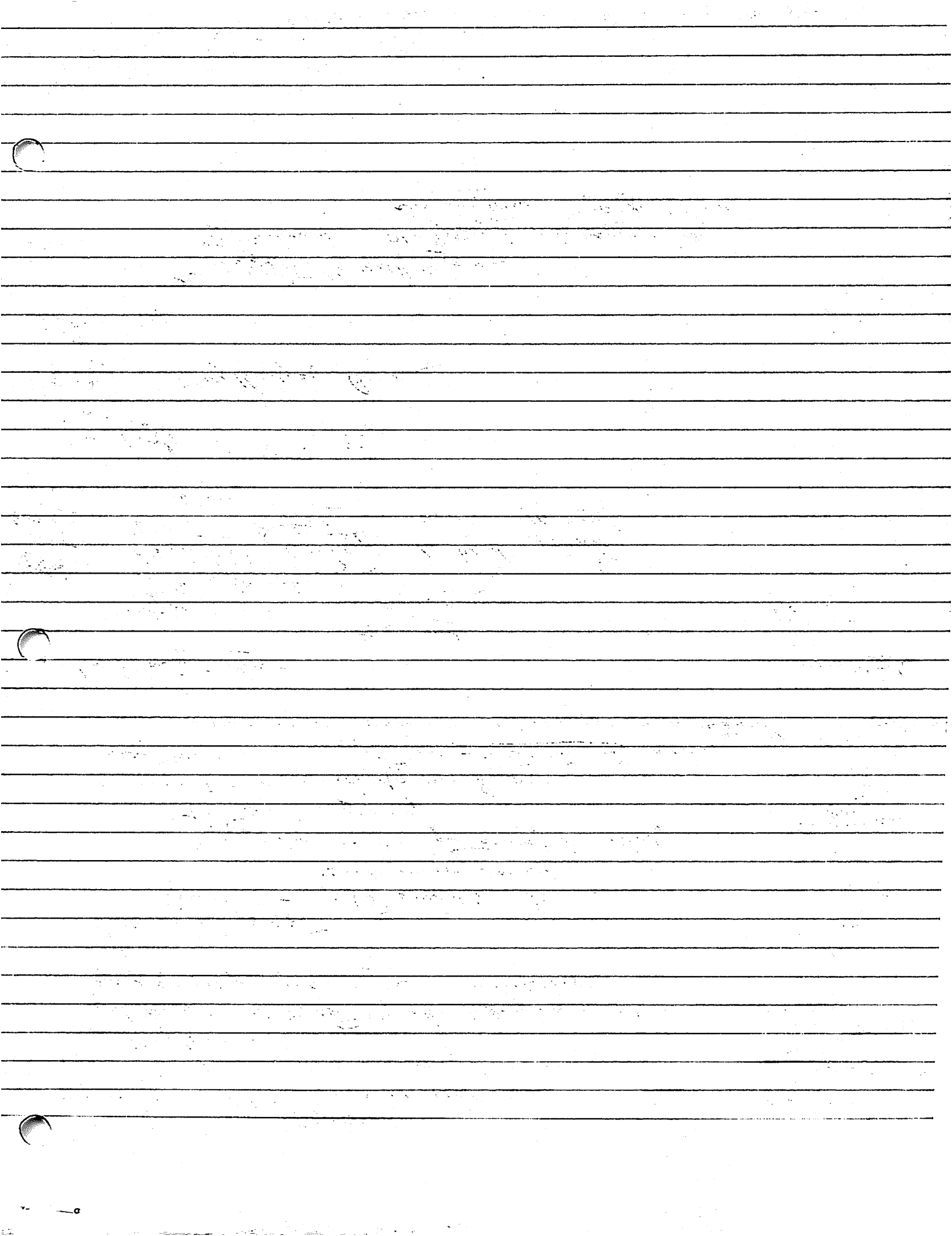
Jeri Fally 6 miles east

Bena May Hodges - Ben
 Cox

Allen Roper

Stocking Rate is based on forage -

No. of animals	26 # of dry forage	= 1 animal day
	air dry forage	780 # for 1 AUM



Engineer
Tester

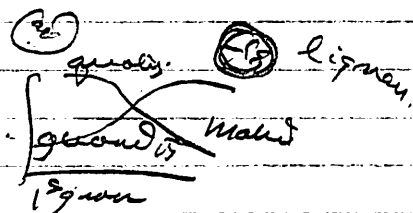
Delhi: Annual Forage Interactions

Quality Quantity

grass coming up - coming out of root reser
quality high 1-2-3-4 leaves

at 5 leaf stage - quality good and bring some quantity

at mature stage - poor quality
Lignin breaks fiber not digestible



Coming out of CRP ground - when it comes out.

Harvest May mature before to seed

Animal - nutrient in leaves

Leaf drives the system

Structure management to manage for leaf

Protein next more important

More nutrients for microorganism

Must have at least 78% crude protein for
microorganism 28-26%

Body of leaves provide protein for cow

By pass protein - complex molecules passing
on through - part may be used by cow

Volatile Fatty Acids also from Bag -
energy source for cow +

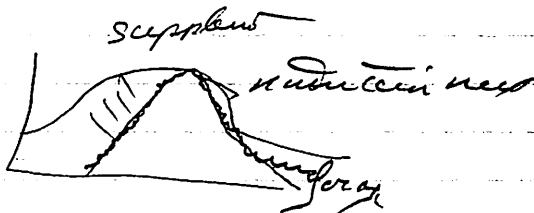
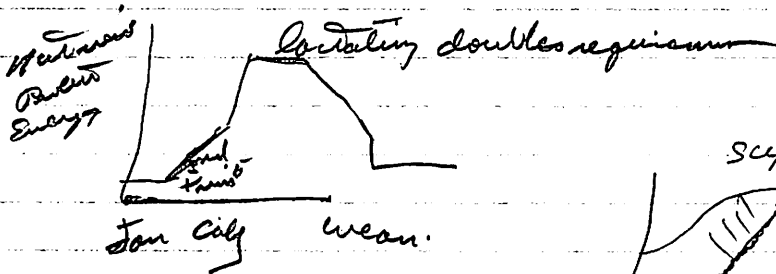
Animal
breed

Designer
breed

clover

pasture
land
recovery

Nutrient Supplied by animals
Animals - 50% of production



Page 6 animals

