Approval Date: February 16, 1996

FREEDOM OF INFORMATION SUMMARY

I. GENERAL INFORMATION

A. File Number

NADA 138-935

B. Sponsor

Pennfield Oil Company
Omaha, Nebraska 68144

C. Proprietary Name

CHLORTETRACYCLINE, 50, 60, 70, 80, 100 & 100MR

D. Established Name

chlortetracycline Type A medicated article

E. Dosage Form

Type A Medicated Feed

F. Dispensing Status

Over the Counter (OTC)

G. Dosage Regimen

See Section I.I. below.

H. Route of Administration

Oral

I. Indication

CHICKENS

10-50 g/t	**Broiler/fryer chickens:** For an increased rate of weight gain and improved feed efficiency.
100-200 g/t	Control of infectious synovitis caused by *Mycoplasma synoviae* susceptible to chlortetracycline. (Feed continuously for 7 to 14 days)
200-400 g/t	Control of chronic respiratory disease (CRD) and air sac infection caused by *Mycoplasma gallisepticum* and *Escherichia coli* susceptible to chlortetracycline. (Feed continuously for 7 to 14 days)

	WARNING: Do not feed to chickens producing eggs for human consumption. Zero-day withdrawal period.
500 g/t	Reduction of mortality due to *Escherichia coli* infections susceptible to chlortetracycline. (Feed for 5 days) ***WARNING*:** Do not feed to chickens producing eggs for human consumption. Withdraw 24 hours prior to slaughter.
TURKEYS	
10-50 g/t	**Growing turkeys:** For an increased rate of weight gain and improved feed efficiency.
200 g/t	Control of infectious synovitis caused by *Mycoplasma synoviae* susceptible to chlortetracycline. (Feed continuously for 7 to 14 days)
400 g/t	Control of hexamitiasis caused by *Hexamita meleagrides* susceptible to chlortetracycline. (Feed continuously for 7 to 14 days) **Turkey poults not over 4 weeks of age:** Reduction of mortality due to paratyphoid caused by *Salmonella typhimurium* susceptible to chlortetracycline.
25 mg/lb body weight daily	Control of complicating bacterial organisms associated with bluecomb (transmissible enteritis, coronaviral enteritis) susceptible to chlortetracycline. (Feed continuously for 7 to 14 days) ***WARNING*:** Do not feed to turkeys producing eggs for human consumption. Zero-day withdrawal period.
SWINE	
10-50 g/t	**Growing swine:** For an increased rate of weight gain and improved feed efficiency.
50-100 g/t	Reducing the incidence of cervical lymphadenitis (jowl abscesses) caused by *Group E Streptococci* susceptible to chlortetracycline.
400 g/t	**Breeding swine:** Control of leptospirosis (reducing the instances of abortion and shedding

	of leptospirae) caused by *Leptospira pomona* susceptible to chlortetracycline. (Feed continuously for 14 days).
10 mg/lb body weight daily	Treatment of bacterial enteritis caused by *Escherichia coli* and *Salmonella choleraesuis* and bacterial pneumonia caused by caused *Pasteurella multocida* susceptible to chlortetracycline. (Feed for not more than 14 days)
	***WARNING*:** Zero-day Withdrawal period.
SHEEP	
20-50 g/t	**Growing sheep:** For an increased rate of weight gain and improved feed efficiency.
80 mg/head/day	**Breeding sheep:** Reducing the incidence of (vibrionic) abortion caused by *Campylobacter fetus* infection susceptible to chlortetracycline.
	***WARNING*:** Zero-day Withdrawal period.
CALVES, BEEF CATTLE, AND NON-LACTATING DAIRY CATTLE	
	***WARNING*:** A WITHDRAWAL PERIOD HAS NOT BEEN ESTABLISHED FOR THIS PRODUCT IN PRE-RUMINATING CALVES. DO NOT USE IN CALVES TO BE PROCESSED FOR VEAL.
0.1 mg/lb body weight daily	**Calves (up to 250 lbs.):** For an increased rate of weight gain and improved feed efficiency.
25-70 mg/head/day	**Calves (250-400 lbs.**)**:** For an increased rate of weight gain and improved feed efficiency.
70 mg/head/day	**Growing cattle (over 400 lbs.):** For an increased rate of weight gain, improved feed efficiency and reduction of liver condemnation due to liver abscesses.
	***WARNING*:** Zero-day withdrawal period
350 mg/head/day	**Cattle:** For the control of bacterial pneumonia associated with shipping fever complex susceptible to chlortetracycline.
350 mg/head/day	**Beef cattle (under 700 lbs.):** Control of active infection of anaplasmosis caused by *Anaplasma marginale* susceptible to chlortetracycline.

0.5 mg/lb daily	**Beef cattle (over 700 lbs.):** Control of active infection of anaplasmosis caused by *Anaplasma marginale* susceptible to chlortetracycline. ***WARNING*:** Withdraw 48 hours prior to slaughter.
10 mg/lb body weight daily	**For calves, beef, and non-lactating dairy cattle:** Treatment of bacterial enteritis caused by *Escherichia coli* and bacterial pneumonia caused by *Pasteurella multocida* organisms susceptible to chlortetracycline. (Treat for not more than 5 days) ***WARNING*:** Withdraw 10 days prior to slaughter.

J. Effect of Supplement

The effect of this Category II supplement is to bring the drug product into compliance with the National Academy of Science/National Research Council/Drug Efficacy Study Implementation (NAS/NRC/DESI) recommendations.

II. EFFECTIVENESS

The drug was the subject of National Academy of Sciences/National Research Council (NAS/NRC) reports which were published in the FEDERAL REGISTER of July 21, 1970 (35 FR 11647). The Academy evaluated these products as probably effective for growth promotion and feed efficiency and the treatment of animal diseases caused by pathogens sensitive to chlortetracycline.

The Academy states that: (1) Claims made regarding "for prevention of" or "to prevent" should be replaced with "as an aid in the control of" or "to aid in the control of"; (2) claims for growth promotion or stimulation are disallowed and claims for faster gains and/or feed efficiency should be stated as "may result in faster gains and/or improved feed efficiency under appropriate conditions"; (3) each disease claim should be properly qualified as "appropriate for use in (name of disease) caused by pathogens sensitive to (name of drug) "; if the disease cannot be so qualified the claim must be dropped; (4) claims pertaining to egg production and hatchability should be changed to "May aid in maintaining egg production and hatchability,under appropriate conditions, by controlling pathogenic microorganisms"; (5) the labels should warn that treated animals must actually consume enough medicated water or medicated feed to provide a therapeutic dosage under the conditions that prevail and, as a precaution, state the desired oral dose per unit of animal weight per day for each species as a guide to effective usage of the preparation in drinking water or feed: and (6)effective blood levels are required for each recommended dosage.

The Food and Drug Administration concurs with the Academy's findings, interpreting the phrase "...cannot be so qualified..." in paragraph (3) to mean "...is not supported by adequate data..." (See Fed. Reg. vol. 35, NO. 140-Tues., July 21, 1970). FDA proceeded to review all available data relating to the effectiveness of products subject to NADA 135-938 to determine which label claims were supported by the requisite proof of effectiveness. That review resulted in a letter to the sponsor in which the agency stated that it had concluded that such data supported effectiveness only for the control and treatment of certain

bacterial diseases susceptible to chlortetracycline pre-mixes in chickens, turkeys, cattle, sheep and swine.

Thereafter, the sponsor complied with the evaluation of NAS/NRC and FDA's conclusions in the following manner:

1. Appropriate oral doses for all the allowable species and claims based on milligrams per pound or gallons per ton are on the current labels.

2. Claims pertaining to egg production and hatchablilty have been deleted from the labels.

3. Each disease claim on the label has been properly qualified with the approriate genus and species of bacteria susceptible to chlortetracycline hydrochloride. Disease claims which were not so qualified have been deleted.

4. Claims made for prevention have been revised to read "Control of..." where appropriate.

5. The manufacturer's label carries the warning statement that treated animals must have the medicated feed adjusted to compensate for variation in age and the weight of animals, the nature and severity of disease signs, and environmental temperature and humidity, each of which affects water consumption.

6. Claims for growth promotion or stimulation have been removed. Allowable claims are for increased rate of weight gain and improved feed efficiency.

III. TARGET ANIMAL SAFETY

No further safety data are required.

IV. HUMAN FOOD SAFETY

The NAS/NRC evaluation of the drug is concerned only with the effectiveness and safety of the drug for the treated animal. FDA's approval of the supplemental application does not involve reevaluation or reaffirmation of the human food safety data in the parent application. The tolerances for residues of chlortetracycline are codified at 21 CFR 556.150.

V. AGENCY CONCLUSIONS

This supplemental NADA satisfies the requirements of section 512 of the Act and demonstrates that Chlortetracycline Type A Medicated Article when used under its proposed conditions of use, is safe and effective for the labeled indications. The approval provides for use of ChlortetracyclineType A Medicated Article for the control and treatment of specific diseases in swine, cattle, chickens,turkeys, and sheep.

The "probably effective" finding of the NAS/NRC regarding chlotetracycline hydrochloride which was published in the **FEDERAL REGISTER** of July 21, 1970, was subsequently reviewed by FDA, resulting in the upgrade to "effective" status with respect to the claims noted in the previous paragraph. The firm submitted revised labeling to conform and, therefore, this supplemental NADA complies with the NAS/NRC evaluation and FDA's conclusions.

When NADA 138-935 was reviewed under NAS/NRC/DESI program, it was an over-the-counter product and this marketing status remains unchanged. Chlortetracycline Type A Medicated Article for use in food-producing animals are also currently on the market as over-the-counter products. Therefore, the Center for Veterinary Medicine has concluded that this product should retain over-the-counter marketing status.

Under the Center's supplemental approval policy (21 CFR 514.106(b)(2)), this is a Category ll change. The approval of this change is not expected to have any adverse effect on the safety or effectiveness of this new animal drug and, therefore, did not require a reevaluation of the human food or target animal safety data in the parent application.

Under the Generic Animal Drug and Patent Term Restoration Act of 1988, this approval does not qualify for an exclusivity period under section 512(c)(2)(F)(iii) of the Federal, Food, Drug, and Cosmetic Act (21 U.S.C. 360b (c)(2)(F)(iii)) because the supplemental application does not contain reports of new clinical or field investigations (other than bioequivalence or residue studies) and in the case of food producing animals human food safety studies (other than bioequivalency or residue studies) essential to the approval and conducted or sponsored by the applicant.

The format of this FOI Summary document has been modified from its original form to conform with Section 508 of the Rehabilitation Act (29 U.S.C. 794d). The content of this document has not changed.