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## **GAS** COMPANY OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION ON ITS OWN MOTION TO ACCEPT NOMINATIONS AND OTHER EVIDENCE AND INFORMATION TO ASSIST IN DETERMINING APRIL THROUGH SEPTEMBER, 1991 GAS ALLOWABLES FOR THE PRORATED GAS POOLS IN NEW MEXICO

RECEIVED

MAR 7 1991

DIL CONSERVATION DIVISION

GAS COMPANY OF NEW MEXICO & WRITTEN COMMENTS ON CASE NO. 10254
SUMMER ALLOCATION HEARING

## INTRODUCTION

Gas Company of New Mexico ("GCNM") appeared at the February 28th hearing on setting summer allowables. In preparation for this hearing, GCNM conducted an extensive analysis of the preliminary allowables as proposed by the OCD. Using a methodology identified by Victor Lyon, GCNM validated the proposed allowables as to reasonableness.

Our analysis indicates that the Southeast New Mexico allowables as proposed are reasonable. In Northwest New Mexico, we concur with the proposed OCD allowable amounts for the Basin Dakota, Blanco Mesaverde and Tapacito Picture Cliffs fields and pools. In the Blanco Picture Cliffs South, the allowables appear to be high. Since the proposed allowables are generally reasonable, GCNM did not plan to present testimony at the hearing. Certain testimony, however, was given by Unocal, Conoco and Meridian that GCNM believes would result in allowables in excess of what is statutorily allowed. Consequently, GCNM submits the following comments on:

- (1) the OCD proposal,
- (2) Amoco's comments,
- (3) the testimony of Unocal and Meridian and finally,
- (4) GCNM's understanding as to what are the statutory requirements that must be considered in prorating pools.

## I. The OCD Proposed Allowables

The following methodology was used to validate the OCD proposed allowables:

The wells that were non-marginal from the February 1991 OCD tape were identified.

The production for these GPUs from April 1990 through September 1990 was computed.

The allowable that these non-marginal GPUs had when they were shut-in during that time period was added.

Fifty percent of the pools' latest overproduction was added to arrive at the total allowable to be assigned to the non-marginal GPUs.

These gross allowables were multiplied by the pools' percentage acreage factor and its percentage acreage deliverability factor.

The gross F1 factor was divided by the appropriate field

and pool participating acreage factor. This number was then divided by the number of months in the allocation period.

The gross F2 factor was divided by the appropriate field and pool participating acreage deliverability factor. This number was then divided by the number of months in the allocation period.

Exhibit 1 is a comparison of the OCD's proposed F1 and F2 factors to GCNM's calculations.

These numbers show that the Basin Dakota, Blanco Picture Cliffs and Tapacito Picture Cliffs allowables are reasonable as proposed by the OCD.

GCNM believes that the pool allowable for South Blanco Picture Cliffs is too high. The F1 factor should be 281 not 350 and the F2 factor should be 13.71 not 17.11. The nominations for the four Northwest New Mexico prorated field and pools are close to the proposed allowables with the exception of the South Blanco Picture Cliffs which is only 49% of the proposed allowable. GCNM respectfully requests that the OCD consider lowering the allowable that is being considered for this field and pool.

## II. Amoco's Comments

Amoco in its oral comments by Mr. Emmons stated:

Amoco recommends that the Division set a prorated pool's market demand and allowable equal to the amount the pool produced during the same period last year without any upward administrative adjustment. This allowable should equal the amount of gas that can be actually sold from the prorated pool since it is based on production from a similar seasonal period. Although this may not reflect the true market demand, it does reflect the "imposed" market demand caused by competition and pipeline capacity constraints. Should the production in the first few months of this period exceed the like period last year, the Division has the ability to increase allowables during the period to accommodate the change in demand or capacity.

Gas Company of New Mexico supports Amoco's recommendation that the OCD pool allowables be set equal to the amount of gas that was produced from these pools during the corresponding period in the preceding year, for the following reasons:

Exhibit 2 clearly shows that while the total production from Northwest New Mexico is increasing, the total percentage of production from prorated fields and pools in Northwest New Mexico is shrinking.

For Exhibit 2, the total Northwest New Mexico production was estimated by increasing the total 1989 Northwest New Mexico production by 10.32%. Exhibit 3 is the 1990 New Mexico natural gas production as published by the OCD. This attachment shows that the State's total production increased by 10.32%.

Ron Merritt of the OCD stated that New Mexico production for 1991 should be similar to its production levels in 1990. Therefore,

one could predict that the production from prorated fields and pools in 1991 will remain constant with that of 1990.

## III. The Unocal and Meridian Proposed Increases in Allowables

Unocal is requesting that the allowable for Basin Dakota be increased based on the overproduction status of twenty of their GPUs. Allowables for a pool with 2,868 GPUs should not be set to satisfy the demands of a few GPUs.

Of Unocal's 80 Basin Dakota GPUs (see Exhibit 4), only four are overproduced as of December 1990. None of these GPUs are close to being shut-in for overproduction. These overproduced GPUs will become less overproduced when the OCD changes the overproduction limit from twelve times a rolling average amount to twelve times January allowable. For these reasons GCNM believes that their request is unfounded.

Meridian used a seven year trend analysis as a basis for its request to increase the allowable for Basin Dakota. Meridian used calendar year production date rather than the corresponding six month allowable period. The New Mexico gas market has changed dramatically in the past few years, and Gas Company of New Mexico believes that past historical production is no longer a good indicator of future behavior.

GCNM conducted an eight year trend analysis (see Exhibit 5) for Basin Dakota for the April through September allocation period.

This analysis shows that the average monthly production over this period was 8,030,595 Mcf. Below is the total production by year for this time period:

April through September Total Production for Basin Dakota

		<u>YEAR</u>			PRO	DDUCTION MCF
		1983			54	,449,065
		1984				,709,179
		1985			58	,895,509
		1986			34	,790,134
		1987			47	,559,878
		1988			42	,094,610
		1989			43	,880,204
		1990			43	,090,006
TOTAL		NUMBER OF YEARS		NUMBER OF MONTHS		AVERAGE MONTHLY PRODUCTION
385,468,585	/	8	/	6	=	8,030,595

This historical trend clearly shows that the OCD allocation of 7,963,265 Mcfs is reasonable. If Meridian's requested increase of 1,000,000 Mcf per month is approved, the six month allowable would be 53,779,590 Mcf (7,963.265 + 1,000,000) (6 months). This amount is substantially larger than the last five years of production.

## IV. Statutory Requirements for Setting Allowables

GCNM believes that Unocal's and Meridian's proposals are not only unreasonable, they exceed the statutory limitations. Prorationing of a specific pool without determining all the factors of "reasonable market demand" affecting the pool is unreasonable and statutorily impermissible.

The Supreme Court of New Mexico in the Case of <u>Continental Oil</u>

<u>Company v. Oil Conservation Commission</u>, 373 P.2d 809 (NM 1962)

stated:

When subsection 65-3-13(c) [now 70-2-16(c)] and subsection 65-3-15(c) [now 70-2-19(E)] are read together, one salient fact is evident - even after a pool is prorated, the market demand must be determined, since, if the allowable production from the pool exceeds market demand, waste would result if the allowable is produced. [Bracketed portions added]

In the Northwest of New Mexico many factors affect (change) "market demand" for that gas, some of those factors are:

- Pipeline interconnection of different pools
- Changes in consumption demand
- Increases in production capability of interconnected pools (e.g., increase in coal seam gas)
- Differences in price for gas
- Depletion of reserves
- Take-away capacity of the pipelines.

Gas is a fungible good. If a pipeline can take from the Basin

Dakota pool or from another pool (including coal seam gas) with equal ease, then this must be taken into consideration in determining the <u>demand</u> for the Basin Dakota gas.

Although the OCD must set allowables on an individual pool basis, the <u>factors</u> affecting demand for a pool's gas are not just within the pool. The factors are statewide or areawide to the extent a purchaser can satisfy its demand on an areawide or statewide basis.

Counsel for Unocal, Conoco and Meridian stated that this Commission could not consider coal seam gas in setting the allowable for the prorated pools. Under 70-2-16 NMSA the OCD is required to take into consideration all pools in order to make sure each pool (prorated or non-prorated) gets its fair share. 70-2-16(D) NMSA states:

In fixing the allowable of a pool under Subsection C of this section, the Oil Conservation Division shall consider nominations of purchasers but shall not be bound thereby and shall fix pool allowable to prevent unreasonable discrimination between pools served by the same gas transportation facility by a purchaser purchasing in more than one pool.

Respectfully, GCNM requests that if a historical basis of demand is used in setting allowables, the underlying factors for that demand in the past must be analyzed and corrected for changes that now exist. This Commission must fairly apportion allowables based on a clear determination of the "reasonable market demand" for the particular prorated pool's gas.

## Conclusion

- GCNM believes that the OCD allowables are reasonable except for Blanco Picture Cliff South.
- GCNM concurs with Amoco that nominations are the best indication of actual demand.
- takes and ignore the current nominated demand, the OCD should attempt to determine the current "reasonable market demand" as required by law. Such an analysis would necessarily include the changes in statewide productive capacity etc., in determining current demand for a given pool.

Sincerely,

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Ann L. Bolton, Manager Contract Compliance

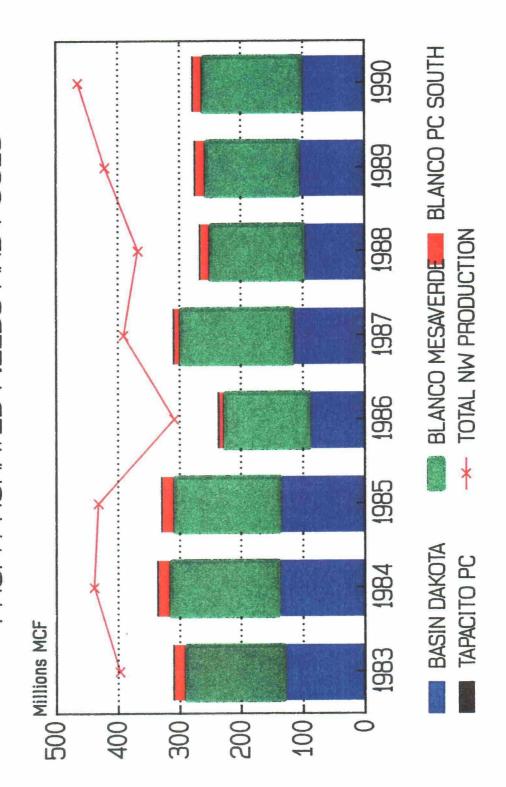
AB:cam attachment

xc: Jim Baca, OCD
Ward Camp, K & M
Melvin Christopher
Gene Gallegos, Gallegos Law Firm
Dan McFearin
William J. Lemay, OCD
Paul Mollo
Jim Morrow, OCD
Bob Stovall, OCD
Bill Weiss, PRRC

EXHIBIT #1

Pool Name	90 Allow	90 Prod	SI Allow	0/U Stat	Tot Alloc	E	F2	NMGPU	NMDEL
Basin-Dak		22,722,450 14,703,096 1,280,081	1,280,081	1,343,747	17,326,924 3,811	3,811	5.264	454.65	219,461
Blanco-MV		48,339,597 36,212,679	1,586,805	2,709,756	40,509,240 2,611	2,611	11.451	634.36	442,214
SBlancoPC	3,615,323	2,676,436	124,388	289,849	3,090,673	281	13.705	458.61	28,190
Tapacito PC	758,862	839,557	8,812	82,545	930,914	375	11.625	103.33	10,010
Pool Name		OCD F1		ALT F1		OCD F2		ALT F2	
Basin-Dak		3,635		3,811		5.02		5.26	
Blanco-MV		2,787		2,506		11.99		11.45	
SBlancoPC		350		281		17.11		13.71	
Tapacito PC		380		375		11.76		11.62	

# COMPARISION OF TOTAL NW PROD TO PROD FROM PROBATED FIELDS AND POOLS



ESTIMATED TOTAL NW PROD FOR 1990

## **NEW MEXICO NATURAL GAS PRODUCTION**

(BILLION CUBIC FEET)

MONTH	1988	YTD	1989/1	YTD	1990	YTD	% DIFF./2
		······································					<del></del>
JAN	84.39	84.39	77.64	77.64	85.78	85.78	10.49
FEB	72.12	156.52	73.17	150.81	78.38	164.16	8.86
MAR	72.84	229.36	73.11	223.92	80.08	244.25	9.08
APR	61.73	291.09	69.70	293.61	74.73	318.98	8.64
MAY	65.47	356.56	65.58	359.19	75.68	394.65	9.87
JUN	60.61	417.16	62.14	421.34	73.10	467.76	11.02
JUL	56.73	473.90	68.62	489.96	74.80	542.56	10.74
AUG	62.46	536.35	70.85	560.80	78.76	621.32	10.79
SEP	60.89	597.24	66.72	627.53	74.10	695.41	10.82
OCT	56.05	653.29	71.28	698.80	79.16	774.57	10.84
NOV	58.8 <b>5</b>	712.14	79.01	777.82	84.85	859.42	10.49
DEC	69.02	781.17	83.02	860.84	90.27	949.69	10.32
TOTAL	781.17		860.84		949.69		

<sup>/1</sup> NMOCD revised data summary, (4-90)

## PRODUCTION OUTLOOK

Preliminary numbers from the Oil Conservation Division show New Mexico natural gas production for the 1990 totalled 949,689,380 Mcf, or 10.32 percent over 1989 production. This is the highest volume of production since 1984 when New Mexico produced slightly over 957 Bcf.

James Newcomb, Director and Coordinator of Natural Gas for Cambridge Energy Research Associates (and a featured speaker for the Fourth Annual New Mexico Natural Gas Marketing Conference and Trade Fair in Santa Fe, NM, on April 15-16, 1991), recently wrote that despite the crisis in the Middle East, a deepening recession, and renewed concerns about energy security, North America's natural gas industry still finds itself "pushing on a string" by bringing new supplies on stream ahead of the growth of new markets. The 20 percent decline since 1986 in the real price of natural gas at the wellhead reflects the consequences of a robust supply picture and slowly growing demand.

Newcomb predicts U.S. production in 1991 will be less than production in 1990, while the

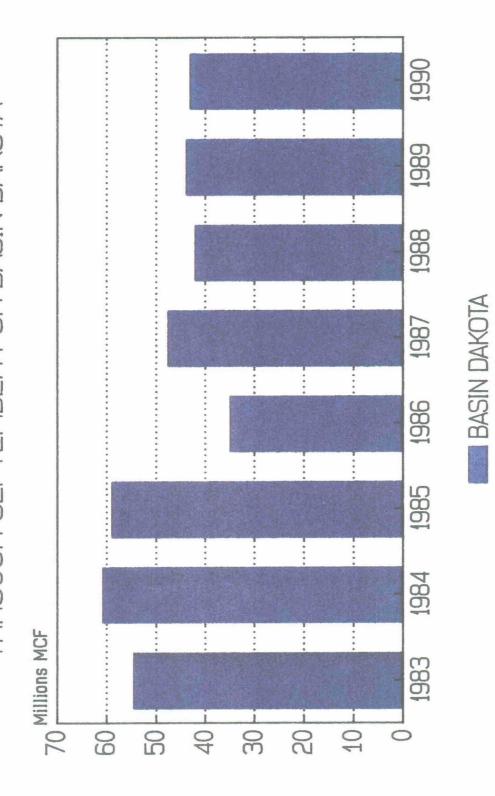
<sup>/2</sup> Percent differences of current year-to-date production from production for the same period of the previous year.

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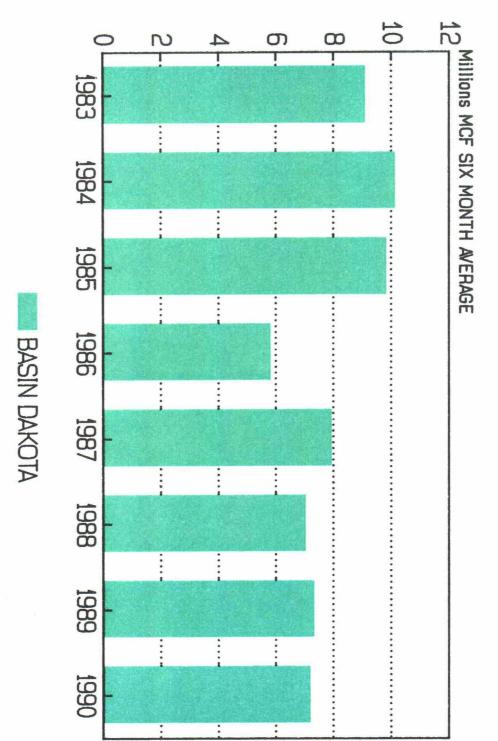
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FOR MARGINAL AND NON-MARGINAL GPUS

## SION OF PRODUCTION FROM APRIL JUGH SEPTEMBER FOR BASIN DAKOTA



FOR MARGINAL AND NON-MARGINAL GPUS

Unocal North American
Oil & Gas Division
Unocal Corporation

3300 North Butler Avenue Suite 200 Farmington, New Mexico 87401 Telephone (505) 326-7600 Fax: (505) 326-6145



March 5, 1991

Paul T. West District Production Manager Farmington District

> William J. LeMay Director Oil Conservation Division P.O. Box 2088 Santa Fe, NM 87504

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DIL CONSERVATION DIVISION

RE: Comments on Northwest New Mexico Gas Allocation Levels,

Case No. 10254

Dear Mr. LeMay:

We welcome the opportunity to make additional comments on the issue of gas allocations and offer the following information in support of my testimony on February 28, 1991.

My testimony suggested the same pool allocations be established for April through September, 1991, as was in place for the same time period during 1990. The only other industry testimony for the Northwest, suggested basing pool allocation on the last 7-years' average (April through September). The attached graphs illustrate the comparison between suggested allocations and the OCD's preliminary estimates.

Gas from the prorated pools has largely been marketed on spot sales since 1988. Allocations for this time period indicate the prorated pools have enjoyed a growth in the market place. The upward trend leads us to believe that establishing allocation at the 1990 level is a conservative approach. As I testified, Unocal's 1991 gas sales will decrease if less allocation is granted than we've suggested. More importantly, we believe that any reduction from the 1990 levels will place producers at risk of losing their market share from prorated pools.

William J. LeMay March 5, 1991 Page 2

Please consider this information in establishing allocations for this first 6-month period. We feel the establishment of semi-annual allocation periods will be a much improved system and we appreciate being able to participate in the effort through the hearing process.

Sincerely,

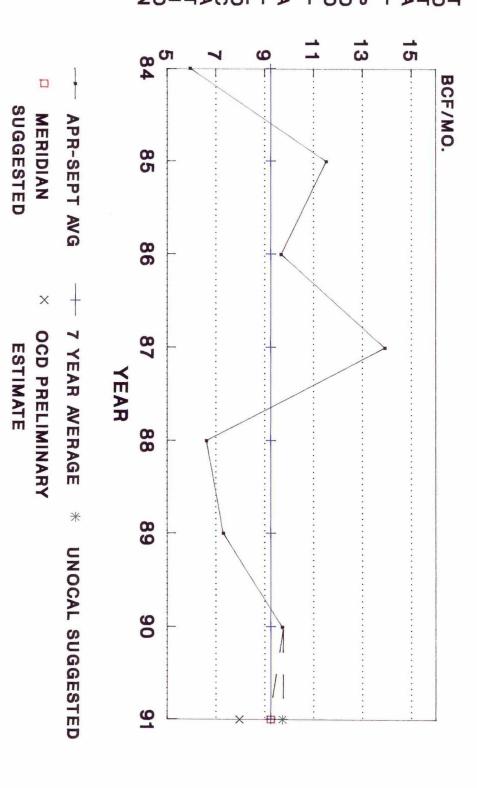
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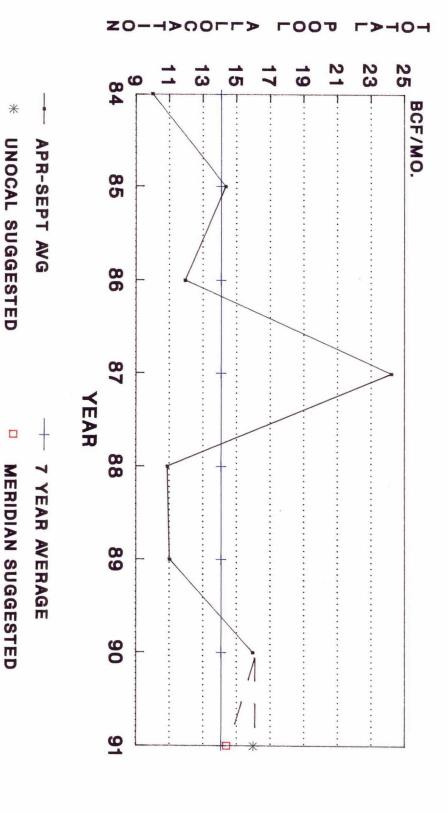
cc Jim Morrow, OCD

Enclosure

## SAN JUAN BASIN BASIN DAKOTA



## SAN JUAN BASIN BLANCO MESA VERDE



AND OCD PRELIMINARY ESTIMATE

EXHIBIT 1
MARKET DEMAND AND ALLOMABLE DETERMINATION SCHEDULE
FOR APRIL THRU SEPTEMBER 1991
PROGRATED GAS POOLS — SOUTHEAST NEW MEXICO

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CATCLAW DRAW Norrow	128126	81515	4000	132126	26629	66131	2.99	22117
CARLSBAD	199702	66035	52000	251702	151805	26865	4.97	20100
BURTON FLAT Murrom	384109	149633	55000	439109	171259	267850	7.88	33991
BUFFALO B VALLEY PENN	208593	190773	20000	228593	145288	83305	3.00	27768
BL INEBRY	436444	236062		436444	151649	284795	15.75	18082
ATOKA PENN	69417	151849	21583	91000	38610	52390	3,42	15319
	(1) AVERAGE MINITALY POOL SALES APRIL - SEPTEMBER 1990, ALL VOL.S ARE IN MCF	(2) TOTAL NUMINATIONS AVERAGE MONTHLY VOLUMES	(3) ADJUSTMENTS	(4) MONTHLY POOL ALLOWABLE APRIL - SEPTEMBER 1991 (LINE 1 + LINE 3)	(5) MONTHLY MARBINAL POOL ALLOWARLE FOR APRIL - SEPTEMBER 1991	(6) MONTHLY NON-MARGINAL POOL ALLOMABLE FOR APRIL - SEPTEMBER 1991 (LINE 4 MINUS LINE 5)	(7) NUMBER OF NON-MAKGINAL ACREAGE FACTORS	(8) MONTHLY ACREAGE ALLOCATION FACTOR

APRIL-SEPTEMBER 1991 F1 FACTORS FOR DTHER POOLS: BURTON FLAT STRAMM F1= 10,000 MONIMENT MCKEE ELLEN F1= 25,000 EXHIBIT 2 MARKET DEMAND AND ALLOWARLE DETERMINATION SCHEDKLE FOR AFRIL THRU SEPTEMBER 1991 FRORATED GAS POOLS - NORTHANST NEW MEXICO

		RGCIN	DI ONCO	RI GMPN	TAPACITA	
		DAKOTA	MESAVERDE	P.C. SOUTH	H HC1 ID	
Ê	(1) AVERAGE MONTHLY POOL SALES APRIL - SEPTEMBER 1990. ALL VOL.S ARE IN MCF	7263265	12379262	1063350	231768	
(2)	TOTAL NOMINATIONS Average monthly volumes	6976715	11148719	607899	233805	
9	(3) ADJUSTMENTS	1200000	2100000	177000	10000	
€	(4) MONTHLY POOL ALLOWABLE APRIL - SEPTEMBER 1991 (LINE 1 + LINE 3)	8463265	14479262	1240350	241768	
<u> </u>	MONTHLY MARGINAL Pool Allowarie For April – September 1991	5208566	7308484	595425	84821	
(9)	NONTHLY NON-MARGINAL POOL ALLOWARLE FOR APRIL - SEPTEMBER 1991 (LINE 4 MINUS LINE 5)	3254699	71.707.78	644925	156974	
(1)	(7) NUMBER OF NON-MARGINAL Acreage factors	454.65	636.36	460.61	103,33	
(8)	(8) NUMBER OF NON-MARGIMAL ACREAGE X DELIVERABILITY FACTORS	220774	4480B0	28292	10010	
6)	19) MONTALY ACREAGE ALLOCATION FACTOR FOR AFRIL-SEPT. 1991,F1	4295	2817	320	380	
(10)	110) MONTHLY ACKEAGE X DELIV ALLOCATION FACTOR FOR APRIL - SEPTEMBER 1991, F2	5.90	12.00	17.10	11.76	