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- 10	Business
	Unit

July 29, 1992

Bureau of Land Management P.O. Box 1449 Santa Fe, NM 87501

New Mexico State Land Office Oil and Gas Development P.O. Box 1148 Sante Fe, NM 87501-1148

Office of District Engineer Bureau of Land Management P.O. Box 959 Farmington, NM 87401 Bureau of Land Management P.O. Box 6770 Albuquerque, NM 87197-6770

Oil Conservation Commission State of New Mexico P.O. Box 2088 Sante Fe, NM 87501-2088

File: DJD-11-416

Gallegos Canyon Unit San Juan County, New Mexico <u>1992 Plan of Development</u>

Amoco Production Company, as Unit Operator, submits the attached 1992 Plan of Development for the Gallegos Canyon Unit for your approval. The subject plan covers only formations from the base of the Pictured Cliffs to basement rock. BHP Petroleum Inc., suboperator of the formations from the surface to the base of the Pictured Cliffs formation, will submit a separate Plan of Development for the formations. The plan proposes the drilling of no new wells during 1992. All affected working interest owners have been contacted and the approval provisions of the Unit Operating Agreement have been followed.

If this Plan of Development is acceptable, please signify your approval in the space provided on the attached sheet and return an approved copy to Amoco Production Companyu at the attention of Emily Miller.

Please direct any questions regarding this correspondence to Emily Miller at (303) 830-4214.

Sincerely,

1

J R Humrich Eam J.D. Hamrick

EAM/cjt

1992 Plan of Development Gallegos Canyon Unit

APPROVED: _____ DATED: _____ Bureau of Land Management (Subject to approval by the Commissioner of Public Lands and the Oil Conservation Division)

APPROVED:

DATED: _____

Commission of Public Lands (Subject to like approval by the Bureau of Land Management and the Oil Conservation Division)

Mun **APPROVED:** Conservation Division oi1'

DATED: 8-6-92

Oil' Conservation Division (Subject to like approval by the Bureau of Land Management and the Commissioner of Public Lands)

The forgoing approval are for the 1992 Plan of Development for the Gallegos Canyon Unit, San Juan County, New Mexico.

92005

Gallegos Canyon Unit San Juan County, New Mexico 1992 Plan of Development

1991 Operations Summary

In 1991 Amoco Production Company, as operator of the Gallegos Canyon Unit, drilled no new wells. This was in accordance with Amoco's 1991 Plan of Development.

Number of Completions

	Participating		
	<u>Active</u>	<u>Inactive</u>	
Dakota	186	58	
Gallup	4	5	
Total	190	63	

Well Status

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As of this date, the total number of wells in the Gallegos Canyon Unit is as follows:

Par	+	~ . ~	· • • •	100
FOI	1.1.			

Dakota (DK)	244
Gallup (GP)	9
Plugged and Abandoned	30
Total	283

1992 Drilling Program

No wells are proposed for drilling during 1990.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Farmington Resource Area 1235 Laplata Highway Farmington, New Mexico 87401



IN REPLY REFER TO: Gallegos Canyon Unit (GC) 3180 (019)

Sec. 10485.

Mr. Richard Tully P.O. Box 268 Farmington, NM 87499-0268

Dear Mr. Tully:

Your letter of March 3, 1992, requested clarification on the commitment status of Tract No. 102 to the Gallegos Canyon Unit. You referred to our letters of July 20, 1991 and Feb. 12, 1992, which contradict each other on this tracts commitment status.

We based our July 20 letter on the information you supplied in your original letter to this office. We assumed that the information you stated in your letter was correct. We regretfully did not do any research on the issue. BHP subsequently requested our determination on the commitment status of Tract No. 102. Since the issue had not been resolved, we researched our unit files. We subsequently determined that the tract was partially committed to the unit and notified BHP of this finding in our Feb. 12, 1992 letter.

For your information, the definition of partially committed (PC) is when the lessor has not committed to the unit, but all the lessees and working interests owners have committed their interests. When this occurs, a well that is drilled on the PC tract can be included in a participating area (PA). However, the working interest owner must allocate the entire production to the PA and also pay the noncommitted parties their just royalty on a leasehold basis.

We hope that this letter clarifies the issue. We regret any problems the contradictions in our letters have caused.

If you have any questions concerning this matter, please call Duane Spencer at (505) 599-8950.

Sincerely,

s John L. Keller

FOR Mike Pool Area Manager

cc: See Attached List BHP Petroleum (Americas) Inc. 5847 San Felipe, Suite 3600 Houston, TX 77057-3005

New Mexico Oil Conservation Division 310 Old Santa Fe Trail, Room 206 $$\mathcal{V}$$ Santa Fe, NM 87503

New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, NM 87410



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Farmington Resource Area 1235 Laplata Highway Farmington, New Mexico 87401



IN REPLY REFER TO: Gallegos Canyon Unit (PA) 3186.1 (019)

FEB. 2 1 1992

BHP Petroleum 5847 San Felipe, Suite 3600 Houston, TX 77057

Re: Gallegos Canyon Unit Initial Fruitland Participating Area "F"

57

PM 8

Gentlemen:

We have reviewed your application for the Initial Fruitland Participating Area "F" of the Gallegos Canyon Unit located in San Juan County, New Mexico.

The economics submitted with your application reflected re-completion costs of the existing wellbore in unit well No. 340 located 1370' from the north line and 475' from the west line of Sec. 24, T. 29 N., R. 13 W. The guidelines for units and participating areas require that each formation be evaluated as a separate zone capable of producing unitized substances in sufficient quantities to pay the expense of drilling, completing, and equipping the well. The guidelines further state that economics are to be based on fixed costs and revenue at the time of the investment with no escalation.

An economic evaluation was conducted utilizing the above parameters based on average well costs per foot in this area at the time the well was re-completed in the Fruitland formation. The results of the economic evaluation were that well No. 340 was a non-paying well.

Your request to establish the Initial Fruitland Participating Area "F" is therefore denied based on poor economics. Please continue to report production from well No. 340 under the existing lease number.

Under the provisions of 43 CFR 3165.3, you may request an administrative review of the non-paying determination. The request, including all supporting documents must be filed in writing within 20 business days of receipt of this correspondence. The appeal must be filed with the State Director, Bureau of Land Management, PO Box 27115, Santa Fe, New Mexico 87502-7115.

Such requests shall not result in a suspension of the non-paying determination unless the reviewing official so determines. Procedures governing appeals from instructions, orders, or decisions are contained in 43 CFR 3165.4 and 43 CFR 4.400 et. seq.

Enclosed for your consideration are some guidelines for submitting Participating area applications as well as a listing of the "Renegotiated Board Rate". We hope you will find this helpful when submitting future applications. If you have any questions concerning the above, please contact Ray Hager at (505) 599-8959.

Sincerely,

Is/ Duane Spencer

ſ OMike Pool Area Manager

4 Enclosures:

1 - Original Application

- 2 PA Guidelines
- 3 Renegotiated Board Rate Listing 4 Economic Evaluation

cc:

Minerals Management Service, RMP, MS-3240 (w/o encl) New Mexico Oil Conservation Division, Santa Fe, NM (w/o encl) Commissioner of Public Lands, Santa Fe, NM (w/o encl)

en antonia de Britania Romando Romando de 10.10.17 5847 San Felipe Suite 3600 Houston, Texas 77057 Telephone: (713) **780-5000** FAX (713) 780-5273 Telex 9108813603

BHP Petroleum

United States Department of Interior Bureau of Land Management Farmington Resource Area 1235 LaPlata Highway

State of New Mexico Commissioner of Public Lands P. O. Box 1148 Santa Fe, NM 87504

Farmington, NM 87401

November 6, 1991

State of New Mexico Energy and Minerals Department Oil Conservation Division P. O. Box 2088 State Land Office Building Santa Fe, NM 87504

Re: Consolidated Fruitland Participating Area Application Gallegos Canyon Unit Area San Juan, NM

Gentlemen:

BHP Petroleum (Americas) Inc., as Unit Sub-Operator, requests your approval in accordance with Section 10 of the Gallegos Canyon Unit Agreement of the selection of the lands indicated on the attached land map, Exhibit "1", to constitute the Consolidated Fruitland Participating Area "B-E". The Gallegos Canyon Unit Well #28 located 400 feet from the north line and 770 feet from the east line of Section 30-T29N, R12W, San Juan County, New Mexico, was drilled to a total depth of 1,227 feet and completed in the Pictured Cliffs formation in 1953. The well was subsequently recompleted in the Fruitland sandstone formation on November 22, 1990. The well was connected for production on May 13, 1991.

The attached Exhibit "2" describes the unit tracts and lands within the proposed consolidated area and the percentage of the total participating area attributable to each. The attached Exhibit "3" contains the engineering data to demonstrate that the subject well is capable of producing unitized substances in paying quantities.

The effective date of the proposed consolidated participating area is December 1, 1990.

Consolidated Fruitland Participating Area Application Page 2 November 6, 1991

Your approval of this application as submitted is hereby requested. Two (2) copies of the application are enclosed for BLM. Should you need more information, please advise.

Very truly yours,

BHP/ PETROLEUM (AMERICAS) INC. Keinhards Ņ

Donald Reinhardt Senior Landman Inland Business Unit

DR:hh

Enclosures

xc: Amoco Production Company P. O. Box 800 Denver, CO 80201 Attn: Michael Cuba

FXHBI	

Consolidated Fruitland Participating Area "B-E" Effective December 1, 1990

	DESCRIPTION T29N, R12W	PARTICIPATING ACRES 40.00	TRACT <u>ALLOCATION</u> 3.571429%
JEC: JO: NLIT NLI/T T29N, R12W Sec: 19: NW1/4 NE1/4	NE1/4	40.00	3.571429%
<u>9N, RI2W</u> c. 19: NEI/4	<u>T29N, R12W</u> Sec. 19: NE1/4 SE1/4, E1/2 NE1/4	120.00	10.714286%
<u>9N. RI2W</u> c. 29: NE1/4	<u> </u>	80.00	7.142857%
<u>9N. RI2W</u> c. 30: W1/2	<u>T29N, R12W</u> Sec. 30: W1/2 NE1/4, SE1/4 NE1/4	120.00	10.714286%
<u>9N. RI2W</u> c. 29: W1/2 S	<u>T29N, R12W</u> Sec. 29: W1/2 SW1/4, SE1/4 SW1/4	120.00	10.714286%
<u>T29N, R12W</u> Sec. 19: SE1/4 SE1/4	SE1/4	40.00	3.571429%
<u>9N. R12W</u> c. 19: W1/2 S	<u>T29N. R12W</u> Sec. 19: W1/2 SE1/4, SW1/4 NE1/4	120.00	10.714286%
<u>9N. R12W</u> c. 29: W1/2 S	<u> </u>	120.00	10.714286%
<u>129N, R12W</u> Sec. 29: NE1/4		160.00	14.285713%
<u>T29N, R12W</u> Sec. 29: NW1/4		160.00	14.285713%
	TOTAL	1,120.00	100.00000%

EXHIBIT "3"

GALLEGOS CANYON UNIT NO. 28 400' FNL & 770' FEL SECTION 30-T29N-R12W SAN JUAN COUNTY, NEW MEXICO UNIT PAY ANALYSIS

The Gallegos Canyon Unit No. 28 was spudded on May 16, 1953, and drilled to a total depth of 1227' on June 8, 1953. 13 3/8" $48^{#}$ /ft surface casing was set at 86' and cemented to surface with 75 sacks Class "Neat" cement. 10-3/4" intermediate casing was set at 300' and cemented to surface. 8 5/8" casing was set at 587' and cemented to surface. 7" casing was set at 1060' and cemented to surface. 5 1/2" 14# production casing was set at 1184', and cemented with 85 sacks "Neat" cement.

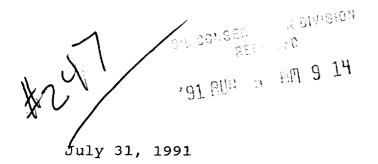
COMPLETION

The well was initially completed in the Kutz Pictured Cliffs formation, open hole 1,180'-1,223'. The formation was then shot with 57 quarts of nitro-glycerine. The well was shutin January 1988, after producing a cumulative 600 MMCF from the Pictured Cliffs.

On November 22, 1990, a CIBP was set at 1150' and the Pictured Cliffs perfs were abandoned. The Fruitland Sand was perforated at 932-934'. The Fruitland was then fractured with 30,500 gal 70 quality N2 foam and 49,750 lbs 20/40 sand. First sales occured on May 13, 1991.

<u>CONCLUSION</u>

Using the economic parameters in the following tables, the well will payout in less than one year. Therefore, it is concluded that the Gallegos Canyon No. 28 Fruitland Sand formation is productive in paying quantities according to the unit agreement and should be classified as a paying well.



8-8-91 D-Unitletto The P

5847 San Felipe Suite 3600 Houston, Texas 77057 Telephone: (713) **780-5000** FAX (713) 780-5273 Telex 9108813603



Department of Interior Bureau of Land Management P.O. Box 1449 Santa Fe, NM 87501

New Mexico State Land Office Oil & Gas Development P.O. Box 1148 Santa Fe, NM 87501-1148 Department of Interior Bureau of Land Management Office of District Engineer 1235 LaPlata Highway Farmington, NM 87401

State of New Mexico Oil Conservation Commission P.O. Box 2088 Santa Fe, NM 87501

RE: Ammendment to 1991 Plan of Development Gallegos Canyon Unit Pictured Cliffs, Fruitland, and Farmington Formations San Juan County, New Mexico

Gentlemen:

As sub-operator of certain unit lands within the Gallegos Canyon Unit located in San Juan County, New Mexico, BHP Petroleum (Americas) Inc. submits for your review and approval the following ammendment to the 1991 Plan of Development.

In 1991, BHP Petroleum (Americas) proposes to drill 1 salt water disposal well. The proposed well, **Gallegos Canyon Unit #13-1** SWD, will be located in SE Section 13-T29N-R13W and the primary objective will be the Mesaverde. It is anticipated that this well will serve as a disposal well for produced waters from both the Pictured Cliffs and Fruitland Coal formations.

We respectfully submit this ammendment to the 1991 Plan of Development and request your approval at your earliest possible convenience. Please provide both BHP Petroleum (Americas) and the Unit Operator, Amoco Production Company, notice of approval of this plan.

Very truly yours,

BHP PETROLEUM (AMERICAS), INC.

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Melissa Torbet Sr. Production Engineer

July 8, 1991

United States Department of Interior Bureau of Land Management Farmington Resource Area 1235 LaPlata Highway Farmington, NM 87401

State of New Mexico Commissioner of Public Lands P. O. Box 1148 Santa Fe, NM 87504

State of New Mexico Energy and Minerals Department Oil Conservation Division P. O. Box 2088 State Land Office Building Santa Fe, NM 87504

Re: Fruitland Participating Area Application for Gallegos Canyon Unit Well #340 Gallegos Canyon Unit San Juan County, NM

Gentlemen:

In February of this year, BHP Petroleum (Americas) Inc., as Unit Sub-Operator, submitted the referenced Participating Area application for approval. Since submitting the application, it has come to our attention that Exhibit "1" attached to the application contained a material error. The proposed participating area is comprised of lands located in the NW/4 Section 24-T29N, R13W. The Exhibit attached to the application indicates the participating area as covering the NW/4 Section 26-T29N, R13W.

Enclosed for your file is a revised Exhibit "1" with the proposed participating area depicted in the correct Section 24. Please substitute the enclosed Exhibit into your copy of the application and discard the Exhibit provided you earlier.

Very truly yours,

BHP PETROLEUM (AMERICAS) INC.

all Keinhardt

Donald Reinhardt Senior Landman Inland Business Unit

DR:CFL

Enclosures

cc: Gallegos Canyon Unit Working Interest Owners orn ochses - 14 DIVI pp - 140

ret 11 12 68 9 04



5847 San Fellpe Suite 3600 Houston, Texas 77057 Telephone: (713) **780-5000** FAX (713) 780-5273

WORKING INTEREST OWNERS <u>ADDRESS LIST</u>

Gallegos Canyon Unit

Amoco Production Company ATTN: Southern Div. Land Manager P. O. Box 800 Denver, CO 80201

Dugan Production Corporation P. O. Box 208 Farmington, NM 87499

Paul Slayton P. O. Box 2035 Roswell, NM 88201

Fina Oil & Chemical Company ATTN: Kevin Pfister 1004 N. Big Spring P. O. Box 2990 Midland, TX 79702

Donald S. Fulsaas Individually and as Executor of Russell Fulsaas Estate 4865 Lowry Road Oakland, CA 94605

Marilyn A. Fulsaas 2440 Bryant Street Palo Alto, CA 94301

Richard M. Fulsaas West 1417 Kiernan Spokane, WA 99250

MMH Trust P. O. Box 489 Roswell, NM 88202-0489

Maalfred S. Johnson and Harold K. Johnson Estate 643 Montezuma Court Walnut Creek, CA 94598

Margaret C. Johnson 1114 Laurel Drive Lafayette, CA 94549 Maryan Klinger Trust 4777 Grouse Run, No. 140 Stockton, CA 95207

Dorothy E. Mengotto 19100 Crest Avenue, No. 10 Castrol Valley, CA 94546

Meridian Oil Production, Inc. P. O. Box 4289 Farmington, NM 87499

Conoco, Inc. ATTN: Administrative Manager 3817 NW Expressway Oklahoma City, OK 73112

Arley P. Geniusz Trust 1405 E. Central Road, Apt. 120C Arlington Heights, IL 60005

Weig Family Trust 6633 Minnehaha Avenue Lincolnwood, IL 60646

Texaco, Inc. ATTN: Joint Operations P. O. Box 46555 Denver, CO 80201-6555

Marbob Energy Corporation P. O. Drawer 217 Artesia, NM 88211-0217

Total Minatome Corporation P. O. Box 4326 Houston, TX 77210

Wood Oil Company 3100 Mid-Continent Tower Tulsa, OK 74103

EXHIBIT "3"

GALLEGOS CANYON UNIT NO. 340 NW NW SECTION 24-T29N-R13W SAN JUAN COUNTY, NEW MEXICO UNIT PAY ANALYSIS

The Gallegos Canyon Unit No. 340 was spudded on January 28, 1985, and drilled to a total depth of 1310' on February 1, 1985. 7", 23#/ft surface casing was set at 159' and cemented to surface with 210 sacks Class "B" cement. 4-1/2", 10.5#/ft production casing was set at 1310', and cemented to surface with 175 sacks 50-50 pozmix.

COMPLETION:

The well was initially completed in the Pictured Cliffs Formation, perfs 1230-33', 1217-23', and 1210-12' with 1 JSPF. The formation was then fractured with 22,000 gallons of 70 Q foam and 30,000 lbs 10-20 sand. The well was turned to the sales line on May 9, 1985.

On September 7, 1989, a CIBP was set at 1150' and the Pictured Cliffs Perfs were abandoned. The Fruitland Sand was perforated at 917-934'. The Fruitland was then fractured with 70 Q Foam and 145,000 SCF N₂, and 33,500 lbs 12-20 sand. The well was tested at a rate of 550 MCFD and 150 psi FTP on a 3/8" choke. First sales occurred on November 1, 1989.

CONCLUSIONS:

Using the economics parameters in the following tables, the well will payout in 0.316 years. Therefore, it is concluded that the Gallegos Canyon No. 340 is productive in paying quantities according to the unit agreement and should be classified as a paying well.

TABLE I

GALLEGOS CANYON UNIT NO. 340 DATA AND ASSUMPTIONS UNIT PAY ANALYSIS

1. Net Pay - 24 ft.

:

- 2. Average Porosity 21.3%
- 3. Average Water Saturation 25.6%
- 4. Well Spacing 160 acres
- 5. Reservoir Temperature 80°F
- 6. Estimated Initial BHP 400 psig
- 7. Line Pressure 115 psig
- 8. Estimated Flowing BHP 120 psig
- 9. Gas Price \$1.10/mcf
- 10. Operating Costs \$875/month
- 11. Taxes 11.5%
- 12. Discount Rate 11.5%
- 13. Royalty 13.2%
- 14. Well Cost \$17,429
- 15. Gas Gravity 0.5768
- 16. Stabilized Test Flow Rate 550 MCFD
- 17. Gross Recoverable Gas 330.0 MMCF

237.std

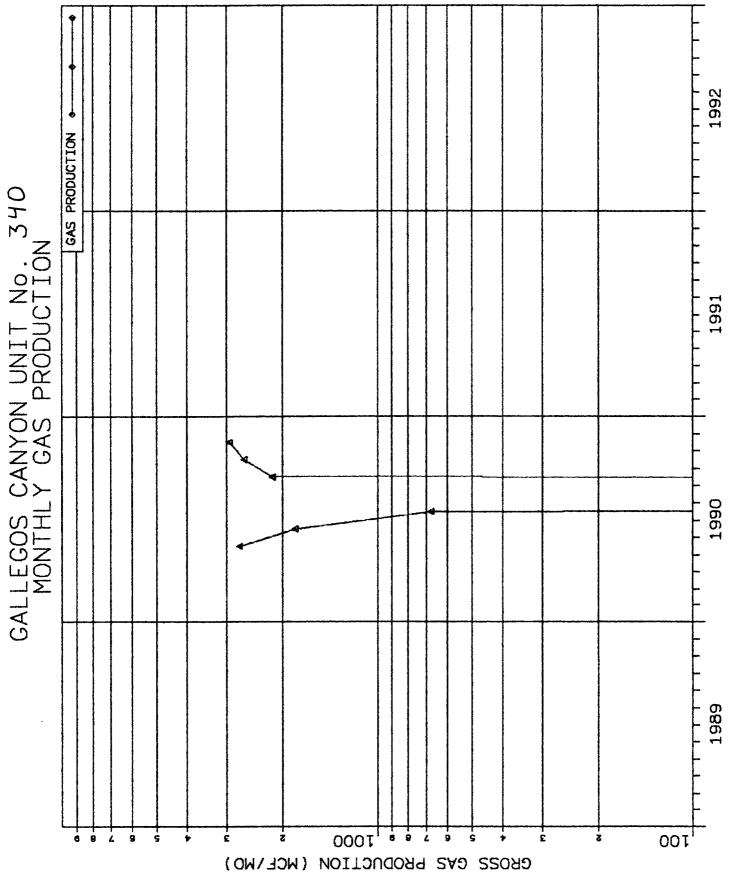
TABLE II

GALLEGOS CANYON UNIT NO. 340 ECONOMICS SUMMARY UNIT PAY ANALYSIS

ITEM	YEAR 1	YEAR 2
Average Production Rate (MCFD)	337	227
Yearly Production (MCF)	122,976	82,994
BHP Net Yearly Production (MCF)	32,596	21,998
BHP Net Value (\$)	35,856	26,811
BHP Net Investment (\$)	5,323	
Net Income Taxes (\$)	9,721	6,634
Net Severance Taxes (\$)	4,984	3,727
Net Operating Expenses (\$)	3,110	3,351
Net Cash Flow (\$)	12,718	13,099
Cumulative Net Present Value (\$)	11,782	22,908

As can be seen, payout occurs during the first year of production.

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Initial Fruitland Participating Area "F" Effective October 1, 1989.

108-A	108	107	106-A	106	105	UNIT TRACT NO.
<u>T29N, R13W</u> Sec. 24: 3.0 acres in the Northwest corner of the SW/4 NW/4	<u>T29N, R13W</u> Sec. 24: S/2 NW/4	<u>T29N, R13W</u> Sec. 24: NE/4 NW/4	A tract of land located in Section 24-T29N, R13W, N.M.P.M., San Juan County, New Mexico, hereinafter described as follows: commencing at the Northeast corner of the NW/4 NW/4 Section 24; THENCE, West 74.75 feet; THENCE South 1,320 feet; THENCE East 74.75 feet; THENCE North along the subdivision line 1,320 feet to the place of beginning, containing 2 acres, more or less	T29N, R13W Sec. 24: The East 28 acres of the NW/4 NW/4 Less and except the following tract of land located in Section 24-T29N, R13W, N.M.P.M., San Juan County, New Mexico: commencing at the Northeast corner of the NW/4 NW/4 of Section 24; THENCE West 74.75 feet; THENCE South 1,320 feet; THENCE East 74.75 feet; THENCE North along the subdivision line 1,320 feet to the place of beginning, containing 2 acres, more or less.	<u>T29N, R13W</u> Sec. 24: The West 12 acres of the NW/4 NW/4	DESCRIPTION
3.0	77.00	40.00	2.0	26.00	12.00	PARTICIPATING ACRES
1.875%	48.125%	25.%	1.25%	16.25%	7.5%	TRACT <u>ALLOCATION</u>

TOTAL

160.00

100.00%