

E X H I B I T "B"

OWNERSHIP SCHEDULE  
 INITIAL FRUITLAND PARTICIPATING AREA  
 GALLEGOS CANYON UNIT  
 SAN JUAN COUNTY, NEW MEXICO  
 EFFECTIVE JUNE 14, 1966

Tract No.	Description of Land	Serial No. & Lease Date	Basic		Owner of Record	Overrides	Working		Acres	Percent Participat
			Owner	Royalty % of 8/8			Owner	Interest % of Lease		
Pt 20	W/2 NW/4, SW/4 Sec. 13-T28N-R12W	SF-078905 7-1-48	USA	12.50	Pan American Petroleum Corp. George J. Darnelle	2.00	Pan American Petroleum Corp. National Drilg Co.	50.00 50.00	240.00	25.11301
Pt 46	Lot 3, SE/4 SW/4 Sec. 18-T28N-R11W	E-2447 2-10-49	State of New Mexico	12.50	Skelly Oil Co.	None	Skelly Oil Co.	100.00	78.93	8.25904
Pt 46R	SE/4 NW/4, W/2 SE/4 SE/4 SE/4, Sec. 13- T28N-R12W, E/2 NW/4, Sec. 18-T28N-R11W	E-2447 2-10-49	State of New Mexico	12.50	Skelly Oil Co.	10.00	Pan American Petroleum Corp.	100.00	240.00	25.11301
Pt 47	Lots 1 and 2 Sec. 18-T28N-R11W	B-10670 12-10-53	State of New Mexico	12.50	Texas & Pacific Coal & Oil Co.	None	Texas & Pacific Coal & Oil Co.	100.00	77.80	8.14080
52	NE/4 SW/4 Sec. 18-T28N-R11W	OG-1045 7-16-57	State of New Mexico	12.50	Pan American Petroleum Corp.	None	Pan American Petroleum Corp.	100.00	40.00	4.18550
53	Lot 4, Sec. 18- T28N-R11W	OG-1531 11-19-57	State of New Mexico	12.50	Pan American Petroleum Corp.	None	Pan American Petroleum Corp.	100.00	38.95	4.07563
56	N/2 NE/4, Sec. 13- T28N-R12W	E-1065-1 1-7-51	State of New Mexico	12.50	Pan American Petroleum Corp.	None	Pan American Petroleum Corp.	100.00	80.00	8.37100
57	NE/4 NW/4, Sec. 13- T28N-R12W	B-11513-16 10-2-44	State of New Mexico	12.50	Pan American Petroleum Corp.	5.00	Pan American Petroleum Corp.	100.00	40.00	4.18550
58	S/2 NE/4, Sec. 13- T28N-R12W	E-3156-2 12-15-49	State of New Mexico	12.50	Pan American Petroleum Corp.	5.00	Pan American Petroleum Corp.	100.00	80.00	8.37101
59	NE/4 SE/4, Sec. 13- T28N-R12W	B-9145-36	State of New Mexico	12.50	Pan American Petroleum Corp.	3.50	Pan American Petroleum Corp.	100.00	40.00	4.18550

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<u>Type of Acreage</u>	<u>Committed Acres</u>	<u>Per Cent Participation</u>
Federal	240.00	25.11301
State of New Mexico	715.68	74.88699
TOTAL	955.68	100.00000

GEOLOGICAL AND ENGINEERING REPORT  
TO SUPPORT THE  
INITIAL PARTICIPATING AREA  
FOR THE FRUITLAND FORMATION  
GALLEGOS CANYON UNIT  
SAN JUAN COUNTY, NEW MEXICO

The proposed Initial Participating Area for the Fruitland formation is based on information obtained from the completion of Gallegos Canyon Unit Wells No. 200, 255 and 256, located in Section 13 - T28N-R12W, and Section 18 - T28N-R11W, San Juan County, New Mexico. Pertinent well completion data for Unit Well Nos. 220, 255 and 256 are furnished as Attachments No. 1, 2 and 3.

The attached isopach map of the sand from which these unit wells are producing shows: (1) that all of the acreage included in the proposed Initial Fruitland Participating Area lies within the productive limits of the respective pool, (2) that the producing formation is continuous, and (3) that the acreage is reasonably proved productive of unitized substances in paying quantities and should be included in the Fruitland Participating Area.

Also attached is a cross section A-A', which shows the sand from which Unit Wells No. 220, 255 and 256 are producing to be continuous and in communication with the sand in other wells in the area. The sand thicknesses used in the isopach map and the cross section were obtained from logs on the wells completed in the Fruitland sand and also those which penetrated the Fruitland but were completed in the Dakota formation.

Acreage proposed for inclusion in the Initial Participating Area for the Fruitland formation consists of the W/2 of Section 18 - T28N-R11W and all of Section 13 - T28N-R12W. The Initial Participating Area for the Fruitland formation contains 955.68 acres, being 715.68 acres of State Land and 240.00 acres of Federal Land.

Gallegos Canyon Unit Well No. 220 was completed as a commercial gas well in the Fruitland formation on June 14, 1966, with an initial potential of 4300 MCFPD from perforation at 1242 - 1252'. The top of the Fruitland formation was encountered at a depth of 1228'. Core and log data indicate the well to contain approximately 15' of pay. Subsequent Unit Wells No. 255 and 256 were completed on September 22, 1966, and December

27, 1966 respectively. Initial potential of Unit Well No. 255 was 3659 MCFD and Unit Well No. 256 was potential for 2472 MCFD, confirming the Fruitland gas discovery and productivity in the area recommended for inclusion in the proposed participating area.

The effective date of the Initial Participating Area for the Fruitland formation will be June 14, 1966, the date of first production of Unit Well No. 220, the discovery well.

ATTACHMENT NO. 1

PERTINENT WELL COMPLETION DATA  
INITIAL FRUITLAND PARTICIPATING AREA  
GALLEGOS CANYON UNIT  
SAN JUAN COUNTY, NEW MEXICO

GALLEGOS CANYON UNIT WELL NO. 220

Location - 1850' FSL and 790' FEL Section 13 - T28N-R12W, San Juan County,  
New Mexico.

Elevation - 5587' RDB 5577' GL

Total Depth - 1332'      Plugged Back Depth - 1289'

Top Pay - 1228' (Fruitland)

Casing Program - 7" CSA 300' and cemented with 150 sacks Type "A" with 2% calcium chloride. Circulated cement to surface. 4 1/2" CSA 1332' and cemented with 100 sacks 50-50 Pozmix followed by 50 sacks of Class "C" neat.

Tubing - 1 1/4" landed at 1248'.

Perforations - 1242 - 52' with 4 SPF.

Stimulation - Spearheaded treatment with 500 gallons of 15% acid. Sand-water fractured with 30,000 gallons water containing 0.08% potassium chloride, and 2 1/2 pounds FR - 8 per 1000 gallons, 20,000 pounds - 20-40 mesh sand, and 10,000 pounds - 10-20 mesh sand. BDP 3100 psi AIR 61 BPD @ 1550 psi.

Potential - Flowed 4300 MCFPD 3/4" choke CPF 350 psi TPF 360 psi

Completion Date - June 14, 1966.

ATTACHMENT NO. 2

PERTINENT WELL COMPLETION DATA  
INITIAL FRUITLAND PARTICIPATING AREA  
GALLEGOS CANYON UNIT  
SAN JUAN COUNTY, NEW MEXICO

GALLEGOS CANYON UNIT WELL NO. 255

Location - 990' FNL 1850' FWL Section 18 - T28N-R11W, San Juan County, New Mexico

Elevation - 5480' RDB            5469' GL

Total Depth - 1294'                    Plugged Back Depth - 1267'

Top Pay - 1160' (Fruitland)

Casing Program - 7" CSA 318' with 175 sacks Type "A" containing 2% calcium chloride.  
Did not circulate. Cemented down outside of casing with 35 sacks  
Type "A" containing 2% calcium chloride.  
4 1/2" CSA 1294' with 100 sacks 50-50 pozmix Type "C" followed by  
50 sacks Type "C" neat.

Tubing - 1 1/2" landed at 1173'

Perforation - 1166 - 80' and 1190 - 1204' with 2 SPF

Stimulation - Spearheaded frac with 500 gallons Reg. 15% HCl. Sand-Water fractured  
with 30,450 gallons water containing 0.8% potassium chloride, 2 1/2  
pounds FR-2 per 1000 gallons, and 30,000 pounds 20-40 mesh sand and  
10,000 pounds 10-20 mesh sand. AIR 61 BPM at 1800 psi.

Potential Test - Flowed 3659 MCFD, 3/4" choke, TPF 287 psig, CPF 516 psig.

Completion Date - September 22, 1966

ATTACHMENT NO. 3

PERTINENT WELL COMPLETION DATA  
INITIAL FRUITLAND PARTICIPATING AREA  
GALLEGOS CANYON UNIT  
SAN JUAN COUNTY, NEW MEXICO

GALLEGOS CANYON UNIT WELL NO. 256

Location - 1815' FNL and 1850' FWL Section 13 - T28N-R12W, San Juan County,  
New Mexico

Elevation - 5565' RDB                      5554 GL

Total Depth - 1352'                                      Plugged Back Depth - 1317'

Top Pay - 1203' (Fruitland)

Casing Program - 7" CSA 297' with 100 sacks Type "A" cement containing 2%  
calcium chloride. Circulated. 4 1/2" CSA 1352' with 125  
sacks 50-50 pozmix containing 2% gel followed by 50 sacks  
neat cement.

Tubing - 1 1/2" landed at 1203'

Perforations - 1204-22 with 4 SPF

Stimulation - Spearheaded frac with 500 gallons 15% HCl.  
Sand-Water fractured with 26,040 gallons water containing 0.8%  
potassium chloride, 2 1/2 pounds FR-2 per 1000 gallons, and  
25,000 pounds 20-40 mesh sand and 5000 pounds 10-20 mesh sand.  
AIR 62 BPM at 1800 psi.

Potential Test - Flowed 2472 MCFD, 3/4" choke, TPF 189 psig, CPF 184 psig.

Completion Date - December 27, 1966