R 5 W R 4 W R 3 W R 2 W R 1 W R 1 E R 2 E R 3 E

PLAT OF PORTION OF SAN JUAN BASIN SHOWING POOLS ESTABLISHED BY NMOCD WITH PRODUCTION FROM MANCOS FORMATION

T 28 N

T 27 N

T 26 N

T 25 N

T 24 N

SPACING — * ACRES/WELL
DENSITY — ** ACRES/WELL

* AS SET BY OCD RULES
** ACTUAL DRILLED DENSITY AS OF 1-1-83

BOULDER MANCOS
SPACING - 80
DENSITY ±80

PUERTO CHIQUITO MANCOS, WEST
SPACING- 640
DENSITY- ±2500

EPCMU

WILD HORSE GALLUP

OJITO GALLUP - DAKOTA
SPACING- 80
DENSITY- ±160

NWPL APP.

LINDRITH GALLUP - DAKOTA, WEST
SPACING- 160
DENSITY- ± 160

CAÑADA OJITOS UNIT
SPACING - 640
DENSITY - ±2500

Mc HUGH APP.

PUERTO CHIQUITO MANCOS, EAST
SPACING — 160
DENSITY — ±160

File 56A

October, 1983

R 5 W R 4 W R 3 W R 2 W R 1 W R 1 E R 2 E R 3 E

T 28 N

T 27 N

T 26 N

T 25 N

T 24 N

PLAT OF PORTION OF SAN JUAN BASIN SHOWING POOLS ESTABLISHED BY NMOCD WITH PRODUCTION FROM MANCOS FORMATION

BOULDER MANCOS

$\Delta P/P$: 2500-4000
INT : —
RECOMB: (1)

PUERTO CHIQUITO MANCOS, WEST

EPCMU

WILD HORSE GALLUP

OJITO GALLUP - DAKOTA

NWPL APP.

PUERTO CHIQUITO MANCOS, EAST

LINDRITH GALLUP - DAKOTA, WEST

$\Delta P/P$: —
INT : —
RECOMB.: 2500-4000

CAÑADA OJITOS UNIT

$\Delta P/P$: 1500-3000
INT. : 2000-3000
RECOMB: (2)

Mc HUGH APP.

NOTES:

(1) Gas Not Sold & Metered Reported GOR's May Not Be Sufficienty Accurate.

(2) N.A. Gas Injection Project

Reservoir Per Acre Volume Of Effective Hydrocarbon Pore Space Determined By:

$\frac{\Delta P/P}{AREA}$ Comparison Of Production/Pressure Coefficients At Different Fractions Of Undersaturated Oil.

INT. TEST By Direct Calculation Of Interference Test Data.

RECOMB. By Recombination To Initial Reservoir Conditions Of Estimated Ultimate Recovery Of Gas And Oil.

File 56A

October, 1983

ESTIMATED EFFECTIVE HYDROCARBON PORE SPACE
FOR SELECTED POOLS PRODUCING FROM THE MANCOS FORMATION
EAST SIDE OF THE SAN JUAN BASIN

		BOULDER	WEST PUERTO CHIQUITO MANCOS
Calculation Method (1) ΔP/P	Estimated Oil-in-Place (MMBbls)	5.5 - 6.0	30 - 50
	Area Contributing (Acres)	1700 - 2200	20,000 - 25,000
	Resulting STBO/Acre	2500 - 3500	1200 - 2500
	FVF	1.1	1.29
	Resulting Effective Hydrocarbon Pore Space (Bbls/Acre)	2750 - 3850	1550 - 3225
	(Use) Bbls/Acre	2500 - 4000	1500 - 3000

Calc. Method (2) Interfer. Test	STO/Acre	N/A	1500 - 2500
	FVF	N/A	1.29
	Hydrocarbon Pore Space Bbls/Acre	N/A	1935 - 3225
	(Use) Bbls/Acre	N/A	2000 - 3000

(1) Comparison of production/pressure coefficients at different reservoir fractions of undersaturated oil.

(2) Direct Calculation of interference test data.

ESTIMATED EFFECTIVE HYDROCARBON PORE SPACE FOR WEST LINDRITH GALLUP DAKOTA POOL

(1) Estimated Average Ultimate Recovery (Bbls/Acre)	100 - 150
(2) Estimated Cumulative GOR (CF/Bbl)	10,000
(3) Estimated Solution Gas (CF/Bbl)	500
(4) Produced Gas Originating From 1 Bbl of Produced Oil (CF)	500
(5) Remaining Gas Accompanying 1 Bbl of Produced Oil Which Originated From Oil Left in the Reservoir (CF)	9,500
(6) ST Bbl of Oil Left in Reservoir Per Bbl of Produced Oil (5) divided by (4)	19
(7) Total Initial ST Oil in Place 1 Bbl Produced Plus Bbls Left in Reservoir (6) (Bbls)	20
(8) ST Bbls in Place (7) x (1) (Bbls/Acre)	2000 - 3000
(9) FVF (Estimated)	1.35
(10) Reservoir Effective Hydrocarbon Pore Space (Bbls/Acre)	2700 - 4050
(11) Use (Bbls/Acre)	2500 - 4000

Calculation method: Recombination to initial reservoir conditions of estimated ultimate recovery of gas and oil.