SCHEDULE OF LEASES
COUNTY: Eddy
STATE: New Mexico

| LEASE NO. | DATE OF LEASE | LESSOR | LESSEE | RECORDED BOOK | RECORDED PAGE | DESCRIPTION | N/A |
|---|---|---|---|---|---|---|---|
| BELCO LEASES: | 190 N/A | 59.375% WI | | | | | |
| 7466-A04 | 12-21-77 | M.D.C. Lakey & Chas. A. Cassidy | Belco Petroleum Corporation | 158 | 177 | Insofar as it covers land in E/2 Sec. 30, S/2 NE/4 & N/2 SE/4 | 80.00 |
| 7466-B04 | 12-21-77 | Earl Cochell | Belco Petroleum Corporation | 158 | 177 | As above | 26.66 |
| 7466-C04 | 12-21-77 | Robert J. Jones, et al | Belco Petroleum Corporation | 158 | 181 | As above | 53.34 |
| F/I from Roy L. McKay of O&GL from Dora Sanders McKnight, et al | | | | | | Insofar as it covers land in E/2 Sec. 30, T23S, R28E: W/2 NW/4 NE/4 and W/2 E/2 NW/4 NE/4 | 30.00 |
| HNG LEASES: | 120 N/A | 37.500% WI | | | | | |
| | 8-3-77 | Catherine Tipton Andreason, et al | Assn.to HNG | 149 | 907 | NE/4 NE/4 & E/2 E/2 NW/4 NE/4, of Section 30, T23S, R28E | 50.00 |
| | 8-3-77 | Catherine Tipton Andreason, et al | Assn to HNG | 150 | 275 | As above | 50.00 |
| | 6-4-80 | Pardue Farms | HNG | 186 | 636 | SE/4 SE/4, E/2 SW/4 SE/4, SW/4 SW/4 SE/4, Sec. 30, T23S, R28E | 70.00 |
| PARDUE FARMS: Bruce D. Pardue: 10 N/A | | 3.125% WI | | | | NW/4 SW/4 SE/4 Sec. 30, T23S, R28E | 10.00 |

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
SEP 21 1981
O. C. D.
ARTESIA, OFFICE

| | | | | | |
|---|---|---|---|---|---|
| Type Test: [X] Initial [ ] Annual [ ] Special | | | | Test Date: 9-8-81 | |
| Company: BELCO PETROLEUM CORPORATION | | | Connection: EL PASO | | |
| Pool: N. Loving (Morrow) | | | Formation: MORROW | | Unit: |
| Completion Date: 8-19-81 | Total Depth: 12,824 | | Plug Back TD: 12528 | Elevation: 3119 K.B. | Farm or Lease Name: COCHELL Com. |
| Csg. Size: 7 5/8 / 5" Liner | Wt.: 33.7 / 22 | d: 6.875 / 4.044 | Set At: 9680 / 12824 | Perforations: From 12309 To 12318 | Well No.: 1 |
| Tbg. Size: 2 3/8 | Wt.: 4.7# | d: 1.995 | Set At: 12,240 | Perforations: From OPEN To ENDED | Unit: I Sec.: 30 Twp.: 23S Rge.: 28E |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE | | | Packer Set At: 12240 | | County: EDDY |
| Producing Thru: TUBING | Reservoir Temp. °F: 197 @ 12,214 | | Mean Annual Temp. °F: 60° | Baro. Press. – $P_a$: 13.2 | State: NEW MEXICO |

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| 12,214 | 12,214 | .6032 | 1.256 | 1.230 | -0- | | 3" | Flange |

| | FLOW DATA | | | | | | TUBING DATA | | CASING DATA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NO. | Prover Line Size | X | Orifice Size | Press. p.s.i.g. | Diff. $h_w$ | Temp. °F | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g. | Temp. °F | Duration of Flow |
| SI | | | | | | | 3522 | | PKR | CHOKE | 72 HRS. |
| 1. | 3 | x | 1.50 | 340 | 7" | 77 | 2750 | 73 | | 10/64 | 1 Hr. |
| 2. | 3 | x | 1.50 | 345 | 14" | 80 | 2221 | 72 | | 13/64 | 1 Hr. |
| 3. | 3 | x | 1.50 | 345 | 22" | 81 | 1640 | 72 | | 16/64 | 1 Hr. |
| 4. | 3 | x | 1.50 | 350 | 28" | 83 | 966 | 73 | | 22/64 | 1 Hr. |
| 5. | | | | | | | | | | | |

RATE OF FLOW CALCULATIONS

| NO. | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure $P_m$ | Flow Temp. Factor Ft. | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
|---|---|---|---|---|---|---|---|
| 1 | 11.13 | 49.72 | 353.2 | .9840 | 1.288 | 1.027 | 720 |
| 2 | 11.13 | 70.82 | 358.2 | .9813 | 1.288 | 1.026 | 1022 |
| 3 | 11.13 | 88.77 | 358.2 | .9804 | 1.288 | 1.026 | 1280 |
| 4 | 11.13 | 100.84 | 363.2 | .9786 | 1.288 | 1.026 | 1451 |
| 5 | | | | | | | |

| NO. | $P_t$ | Temp. °R | $T_t$ | Z |
|---|---|---|---|---|
| 1 | .523 | 537 | 1.52 | .949 |
| 2 | .531 | 540 | 1.53 | .950 |
| 3 | .531 | 541 | 1.53 | .950 |
| 4 | .538 | 543 | 1.54 | .950 |
| 5 | | | | |

Gas Liquid Hydrocarbon Ratio -0- Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons -0- Deg.
Specific Gravity Separator Gas -0- XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 675 P.S.I.A. ____ P.S.I.A.
Critical Temperature 353 R ____ R

$P_c$ * 3506.5 $P_c^2$ 12,296

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | 2763 | 7634 | 4662. |
| 2 | | 2272.1 | 5162 | 7134. |
| 3 | | 1730.2 | 2994 | 9302. |
| 4 | | 1112.0 | 1237 | 11059. |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.11185$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.08921$

$\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1,580$

Absolute Open Flow 1,580 Mcfd @ 15.025 Angle of Slope θ 51° 08 Slope, n .80594

Remarks:

| Approved By Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | W.S. | M.K. | M.K. |