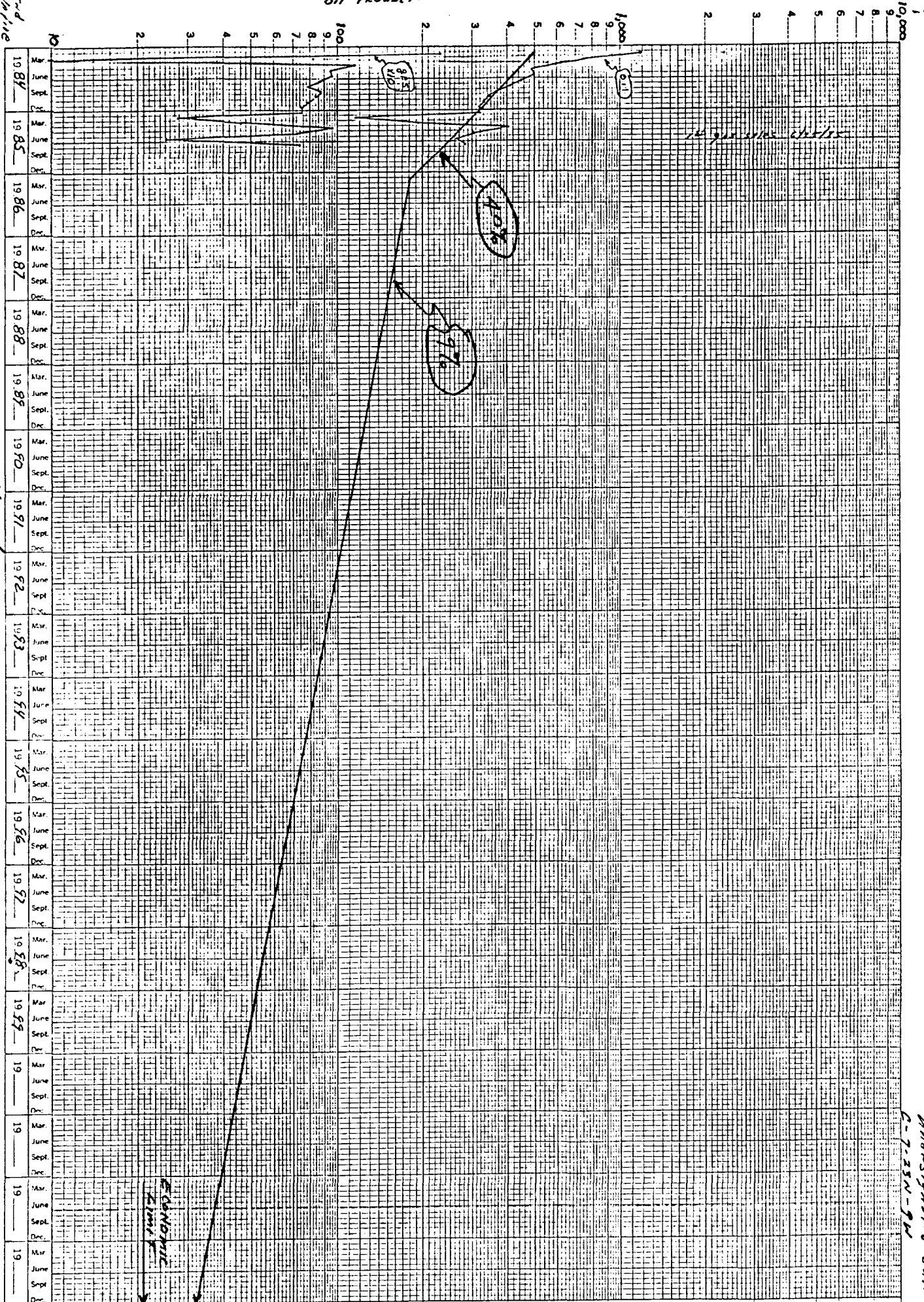


Before the NMOCD
Application of Dugan Production Corp.
New Pool Creation
Good Times Gallup Oil Pool
San Juan County, New Mexico
August 28, 1985
Case #8685 Exhibit # 6

K-E 20 YEARS BY MONTHS X 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

47 6840

gas production - mcf/mo x 10
oil production - bbl/month



year end cumulative
oil bbl - 5754
gas mcf - 10,373

ultimate Recovery & Economic Limit:

$$= 7636 + (235 - 180) 23.5 + (180 - 21) 127.2$$

$$= 7636 + 1293 + 20,225$$

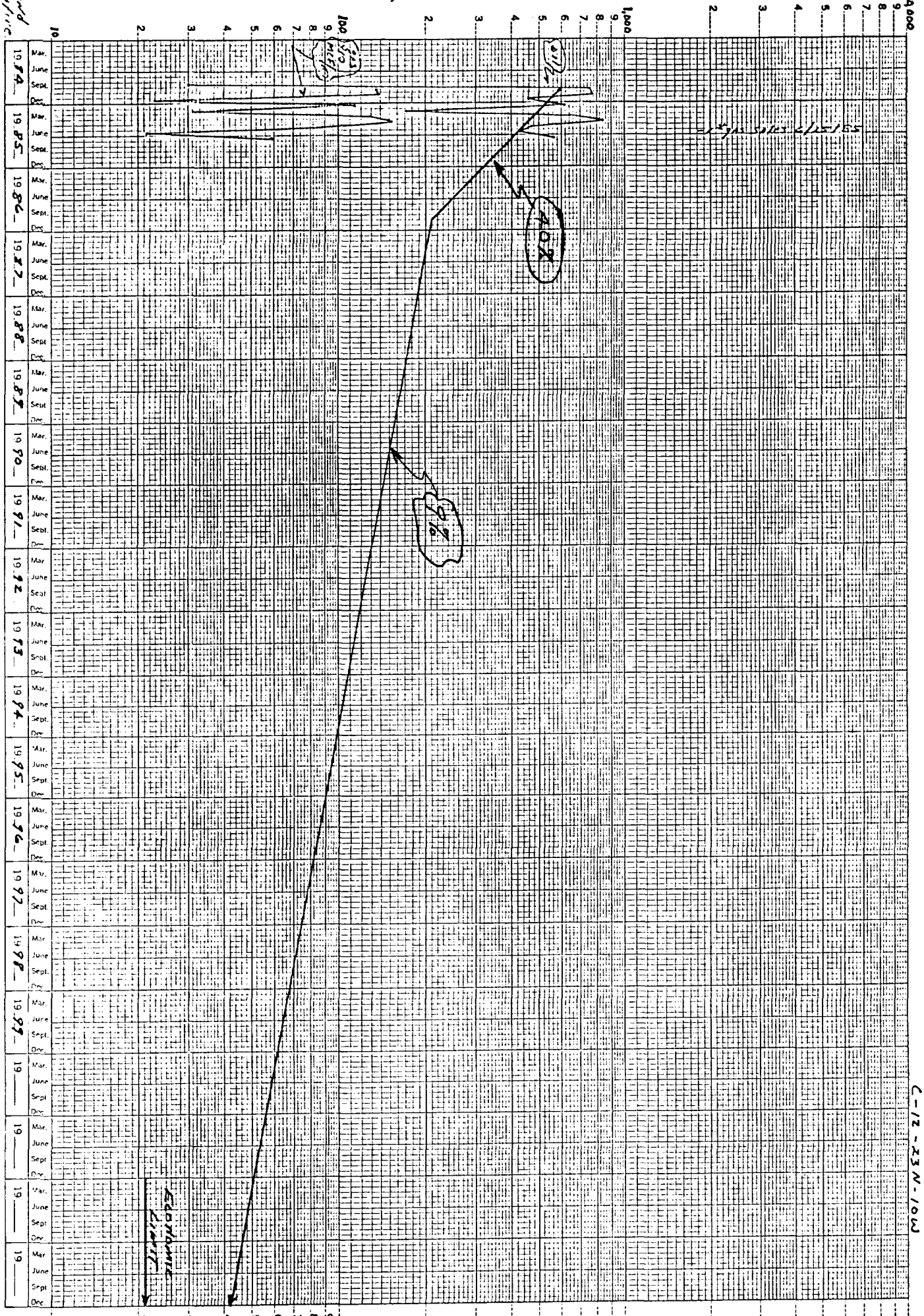
$$= 29,200 \text{ bbl}$$

December 1985
W. J. 23N-9W

gas production - mcf/month 110
oil production - bbl/month

8000 end
Cumulative

oil 111- 2009
gas 111- 1989



ultimate Recovery & Economic Limit:

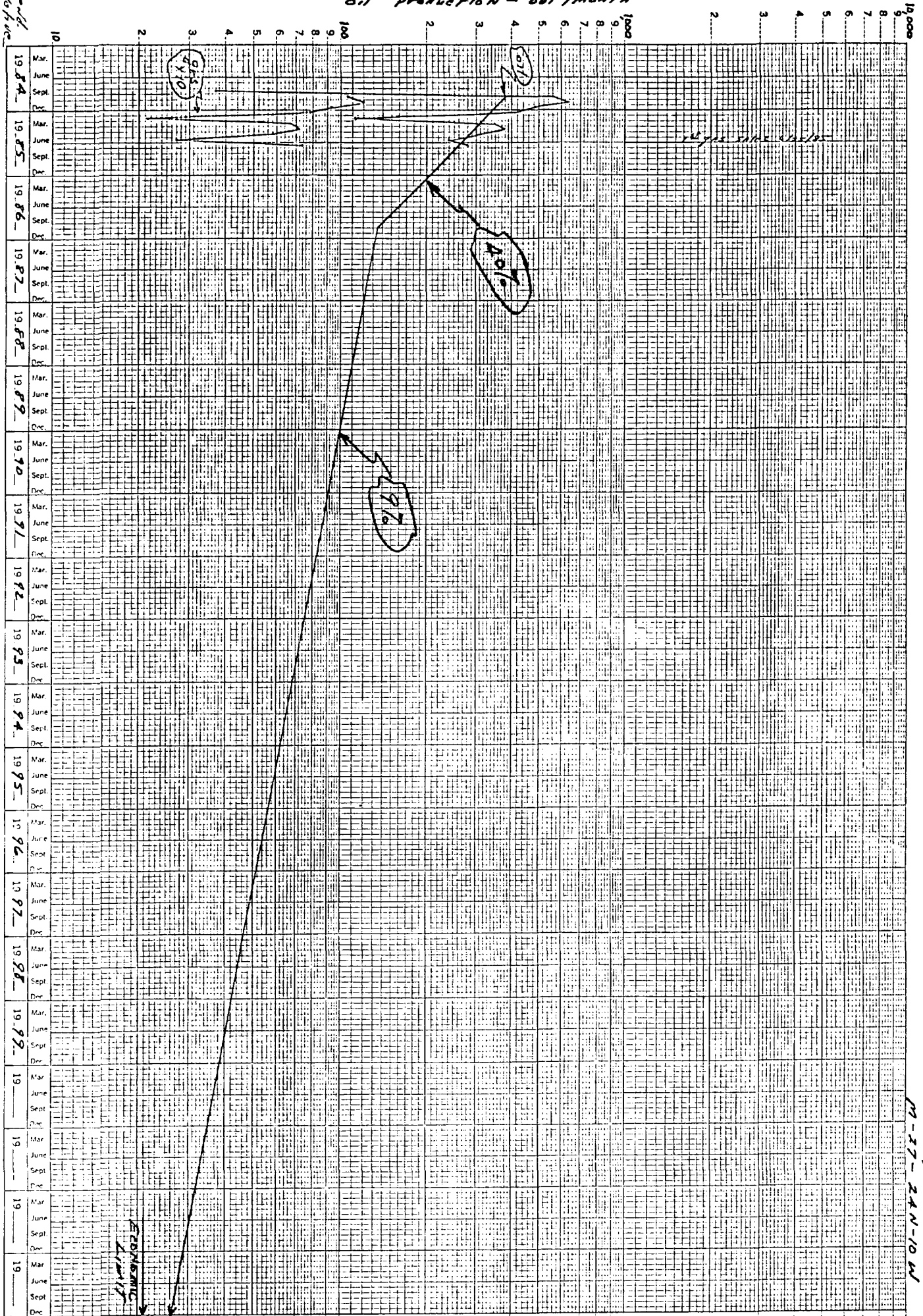
$$= 5739 + (385 - 210) 23.5 + (210 - 21) 122.2$$

$$= 5739 + 4112 + 24,041$$

$$\approx 33,900 \text{ bbl}$$

with No. 4
underground 6000 (5
C-12-23N-10W)

gas production - mcf/month x 10
oil production - bbl/month



year end
cumulative
oil bbl - 1988
gas mcf - 3196

ultimate Recovery & Economic Limit:

$$= 3775 + (250 - 135) 23.5 + (135 - 21) 127.2$$

$$= 3775 + 2703 + 14,501$$

$$\approx 21,000 \text{ bbl}$$

Sliver Model No. 1
undiscovered GRIPE (55)
M-27-24N-10W

PAY DATA & DRAINAGE AREA CALCULATIONS
DUGAN PRODUCTION'S PROPOSED GOOD TIMES GALLUP OIL POOL AREA
T-23 & 24N, R- 9 & 10W, SAN JUAN COUNTY, NEW MEXICO

Well	Ultimate Recovery from Prod. Data-STB (1)	Perforations		RESERVOIR PAY DATA (2)		Calculated Volumetric Recovery -STB/Acre - (3)	Estimated Drainage Area for Production Indicated Reserves (4)
		Gross Interval	Seperate Intervals	Good Times Sand Ft. - 0 - Vsh	Additional Primary Sands Ft. - 0 - Vsh	Secondary Sands Ft. - 0 - Vsh	
December Dream #1	29,200	384	32	6'-12 1/2% - 4%	13'-8.4%-31%	44'-7.5%-37%	433 310-621 66 47-94
Witty #4	33,900	290	37	8'-10.1%-13%	6'-11.5%-17%	31'-5.6%-36%	390 260-520 87 65-130
Silver Medal #1	21,000	312	32	4'-7.0%-42%	12'-10.0%-38%	32'-6.6%-49%	217 187-375 97 56-112

Footnotes:

- ① - Extrapolation of production data thru 7/85 to economic limit of 21 BOPM (opex = \$500/mo. - oil price = \$26.50/bbl less 93¢/bbl trucking-gas price = 3.00/MMBTU & adj. for 1200 BTU gas, GOR = 1700. Net interest average 82.70%).
- ② - Reservoir data divided into 3 catagories based upon analysis of open hole logs, drilling time data and sample analysis data: (a) Good Times Sand is considered to be the primary zone of development, (b) Additional Primary Sands are sands other than the Good Times Sand that are thick enough and/or log and sample data indicates they should contribute significantly to production, (c) Secondary sands are sand stringers that either due to being thin and/or shaleyess will not likely contribute significantly to production, but will likely contribute sufficiently to justify completion.
- ③ - Calculated recovery factors using $[7758 \cdot A \cdot h \cdot \phi \cdot (1 - S_w) \cdot (1 - V_{sh}) / B_0] \cdot R_F$
Water saturations were estimated to be 40%, since actual values could not be calculated due to thin beds and inability to measure RT in any one bed. The oil formation volume factor of 1.26 RB/STB is typical to the Gallup in this area. Recovery factors were estimated to range from 5 to 10% in the primary zones and 1/4 to 1% in the secondary zones of interest. The probable recovery was determined utilizing a $R_F = 10\%$ in Good Times Sand, 5% in Additional Primary Zones and 1/4% in Secondary Zones.
- ④ - Drainage area was determined by dividing the indicated ultimate production based recovery by the volumetrically calculated recovery factor.