

ARTESIA UNIT
RESERVES TABLE

Primary Operations (First Producer in 1/26)

Cumulative Recovery @ Flood Start (7/65)	1103 MBO
Remaining Reserves @ Flood Start	524 MBO
Ultimate Primary Reserves @ Flood Start	1627 MBO
Maximum # of Wells	57
Average Reserves per Well	29 MBO/Well
Acres	2280 acres
Average Reserves per Acre	.7 MBO/acre

Current Operations

Cumulative Recovery @ 6/01	2975 MBO
Remaining Reserves @ 6/01	180 MBO
Ultimate Current Reserves @ 6/01	3155 MBO
Current Cumulative Gas	1332 MMCF
Current Cumulative Water Production	3779 MBW
Current Cumulative Water Injection	24464 MBW
Maximum # of Wells	64
Average Reserves per Well	49 MBO/Well
Acres	2280 acres
Average Reserves per Acre	1.38 MBO/acre

Proposed Operations

Proposed Producing Wells	35 Wells
Proposed Injection Wells	0 Wells
Proposed Conversions to Injection	41 Wells
Capital Cost	13540 M\$
Incremental Reserves	4069 MBO
Total Ultimate Reserves	7224 MBO

Artesia Unit Incremental Reserves

Recompletion – 1,920 MBO

Recompletion reserves are calculated based upon several recompletions in the Artesia Unit. Incremental reserves were calculated for these recompletions and resulted in an average recovery figure of 1MBO per foot of pay. The proposed recompletion intervals amount to 1,200'. A 50% risk-factor was applied, which resulted in a 600 MBO recovery figure. A waterflood recovery factor of 2.2 was then applied to the 600 MBO for a total expected reserve figure of 1,920 MBO.

Collapsing the Flood Pattern – 2,255 MBO

Several offset waterfloods developed on various well spacings were analyzed for recoveries per acre and per well. Graphs were constructed showing the increased recovery verses tighter spacing. Based on this data, it is reasonable to conclude that the Artesia Unit will add 2,255 MBO in incremental waterflood reserves drilling additional wells and collapsing the spacing from 36 acres to 20 acres per well.

ARTESIA UNIT OOIP COMPARISON

Original Oil in Place by Zone:

Loco Hills	7256 MBO
Metex	13191 MBO
Premier	16859 MBO
Lovington	<u>9487 MBO</u>
TOTAL	46793 MBO

Ultimate Primary Reserves= 1627 MBO **3.5 % of OOIP**

Current Operations Ultimate Reserves= 3155 MBO **6.7 % of OOIP**

Proposed Ultimate Reserves= 7224 MBO **15.4 % of OOIP**