Middle San Andres Volumetric Analysis

$$OOIP = \frac{(\text{Volume, ac-ft}) * (\text{bbl/ac-ft}) * (1-Sw) * (\text{Porosity})}{Bo_i}$$

Volume, ac-ft - See Planimeter Calculation Sheet for Middle San Andres
bbl/ac-ft - 7,758 bbl/ac-ft
Sw - 43.88% (from CORE Data, See Core sheet)
Porosity - 4.5% (from CORE data, See Core Sheet)
Bo_i - 1.27 initial formation volume factor: (from CORE data and Standing Correlation Chart, See Core Sheet)
~Bo_i data estimated from Standing Correlation Chart using, Reservoir Temperature of **100deg F, GOR = 700scf/bbl, Oil Gravity = 34deg API**

$$OOIP = \frac{(58{,}175.6) * (7{,}758) * (1 - 0.4388) * (.045)}{1.27}$$

OOIP = 8,974,641 BO

Primary Recovery Factor - **12%**

Recoverable Oil = 1,076,956 BO

Lower Middle San Andres Volumetric Analysis

$$OOIP = \frac{(\text{Volume, ac-ft}) * (\text{bbl/acreft}) * (1-Sw) * (\text{Porosity})}{Bo_i}$$

Volume, ac-ft - See Planimeter Calculation Sheet for Lower Middle San Andres
bbl/ac-ft - 7,758 bbl/ac-ft
Sw - 43.88% (from CORE Data, See Core sheet)
Porosity - 4.5% (from CORE data, See Core Sheet)
Bo_i - 1.27 initial formation volume factor: (from CORE data and Standing Correlation Chart, See Core Sheet)
~Bo_i data estimated from Standing Correlation Chart using, Reservoir Temperature of **100deg F, GOR = 700scf/bbl, Oil Gravity = 34deg API**

$$OOIP = \frac{(187{,}200.49) * (7{,}758) * (1 - 0.4388) * (.045)}{1.27}$$

OOIP = 28,879,070 BO

Primary Recovery Factor - **12%**

Recoverable Oil = 3,465,488 BO

Case No. 20253
SEGURO OIL & GAS
Exhibit #13

Combined Recoverable OIL from both Middle and Lower Middle San Andres is **4,542,444 BO**

108 Well Locations on 20 acre spacing would yield an AVERAGE per WELL ESTIMATED ULTIMATE RECOVERY of ***42,059 BO per well***.

54 Well Location on 40acre spacing would yield an AVERAGE per WELL ESTIMATED ULTIMATE RECOVERY of ***84,119 BO per well.***

Using a recoverable oil range of **42,059 - 84,119 BO** per well and an AFE cost of **$857,000.00**, the F&D costs fall in a range between **$20.38 - $10.19 per barrel.**