Reservoir Fill-up Volume

Zone	Pay ft	Porosity	Water Saturation	Initial FVF RB/BO	OOIP/AF BO/Ac-ft	Area Acres	OOIP MBO	Pore Volume MBBLS
Blinebry	41	8.10%	29.7%	1.45	305	2480	30676	63272
Drinkard	93	9.60%	24.7%	1.45	387	2480	89012	171404
Total	133		26.0%				119688	234676

*Blinebry/Drinkard Porosity and Water saturation based on log analysis of recent infill wells with full log suites using 5% porosity cutoff and 40 API.

	Blinebry	Drinkard	Total	
Cum Recovery, MBO	0	0	13075	40 acre wells (B+D)
Cum Recovery, MBO	0	0	13440	40 + 20 acre wells (BTD)
Remaining Reserves, MBO	0	0	602	40 acre wells
Remaining Reserves, MBO	0	0	1925	40 + 20 acre wells
Ultimate Prim Recovery, MBO	0	0	13677	40 acre wells
Ultimate Prim Recovery, MBO	0	0	15365	40 + 20 acre wells

Current Recovery Factor, %	11%	
Primary Ultimate Recovery Factor, %	11%	40 acre wells
Primary Ultimate Recovery Factor, %	13%	40 + 20 acre wells
Current FVF, RB/STB	1.2	Based on est resvr press of 500 psi
Current Oil Saturation, %	54%	So = (1-Npp/Nob)(Bo/Bobp)(1-Swc)
Current Gas Saturation, %	20%	Sg = (1 - Swc - So)
Fill up volume, Mbbls	46050	Wif = (Pore Vol * Sg)
Avg Inj Rate/well, BWPD	489	Analogy to NEDU
No. of Inj wells	27	Proposed unit development
Total Injection, BWPD	13203	Avg Inj Rate x # of inj wells
Fillup time, yrs.	9.6	Fill up volume/total inj rate
80 acre 5 spot sec/primary ratio	0.41	Analogy to NEDU
Secondary reserves, MBO	5608	Ultimate Prim Rec x sec/prim ratio
	5%	RF
40 acre 5 spot sec/primary ratio	0.2	Analogy to NEDU
Secondary reserves, MBO	2804	Ultimate Prim Rec x sec/prim ratio
	2%	RF
Fully Developed Secondary Reserves, MBO	8411	
	(1,041)	11 of 62 proration units (40 ac) inactive @ start of flood
	-1%	RF
	(1,256)	27 of 62 proration units (20 ac) inactive @ start of flood
	-1%	RF
	6114	Recommended Secondary Reserves
	5%	RF

6.1 Million Barrels

Oil Conservation Division
Case No. _____
Exhibit No. 27