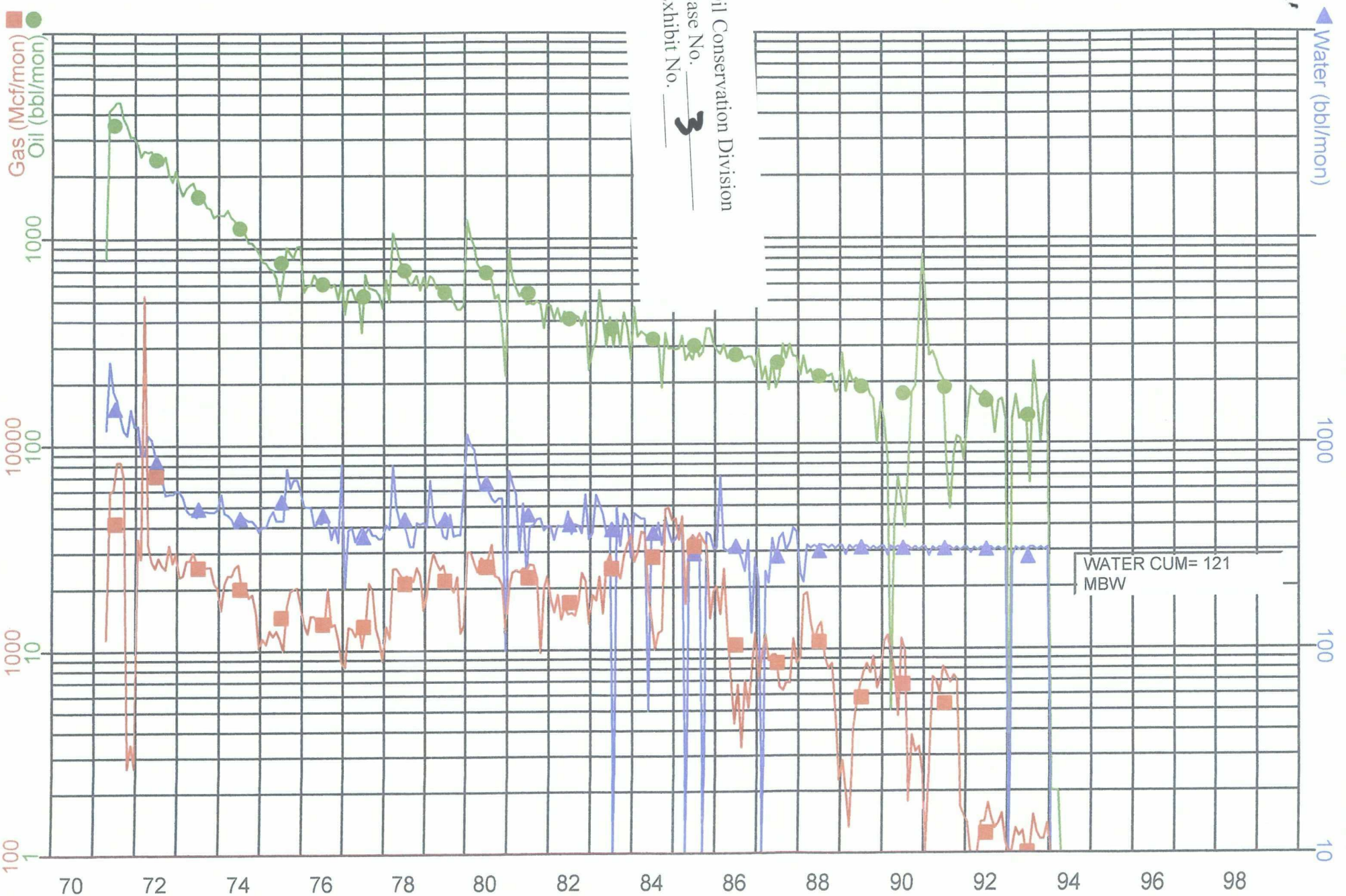
Case Name: GOVERNMENT E 1
Oper: SUBSURFACE WATER DISPOSAL INCO
Location: S 19.0/E 34.0/SEC 25.0

Field: LEA
County,State: LEA,NM
API Number: 3002523780000

Oil Conservation Division
Case No. ____
Exhibit No. 3



Proj Oil Cum: 181.83 Mbbl
Oil Rem: 0.00 Mbbl

Proj Gas Cum: 517.30 MMcf
Gas Rem: 0.00 MMcf

GOVERNMENT E-1 VOLUMETRICS (SWD)

Perfs 9716-20
For volumetrics use zone @ 9716-30

	(Por)h
(Por)h = 6' @ 6%	.36
6' @ 11%	.66
2' @ 5%	.1
	1.12/14= .08

Sw
RT = 200 Ohms
Rw=.03 Ohms
Sw=15%

$$Sw=\sqrt{\frac{Rw}{0^2\ RT}}$$

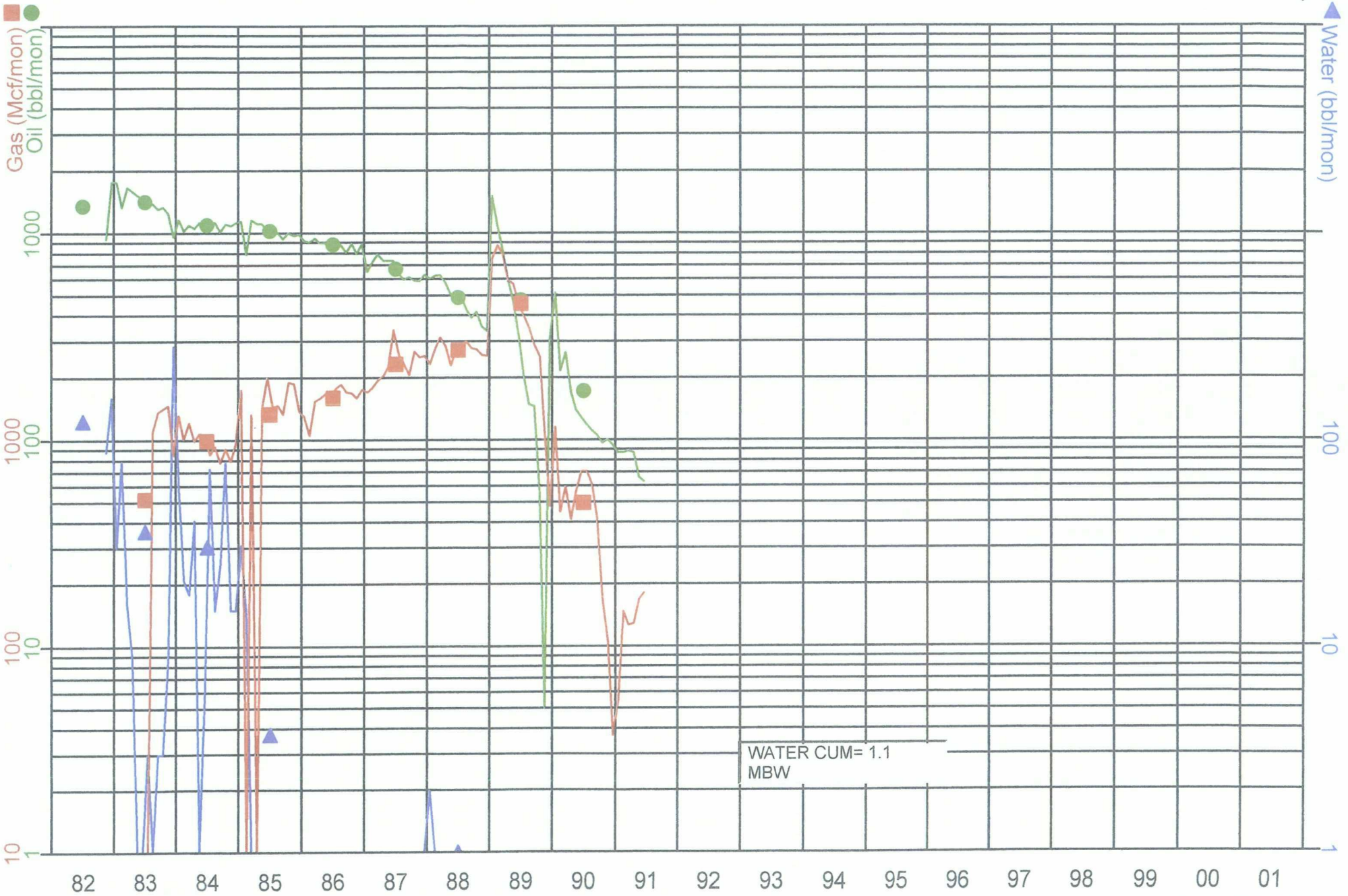
$$Sw=\sqrt{\frac{.03}{(.08)^2(200)}}=.15$$

$$OOIP=\frac{7758(40)(1.12)(1-.15)}{1.3}=227\ MBO$$
$$=5681\ Bbl/ac.$$

If well recovered 181 MBO @ 15 % Recovery factor
181,000 Bbls = 181,000/5681/.15=210 acres

Case Name: GOVERNMENT E 7
Oper: ARMSTRONG ENERGY CORPORATION
Location: S 19.0/E 34.0/SEC 25.0 NE NW

Field: LEA
County,State: LEA,NM
API Number: 30025278960000



Proj Oil Cum: 77.96 Mbbl
Oil Rem: 0.00 Mbbl

Proj Gas Cum: 175.09 MMcf
Gas Rem: 0.00 MMcf

GOVERNMENT E-7 VOLUMETRICS (ARMSTRONG BONE SPRING)

Perfs 9736-54

	(Por)h
(Por)h = 4' @ 3%	= .12
4' @ 5%	= .20
4' @ 2%	= .08
4' @ 25%	= 1.00 (Fracture?)
2' @ 2%	= .04
	1.44/18=.08

Sw
RT = 200 Ohms
Rw=.03 Ohms

Sw=15%

$$Sw^2\sqrt{\frac{.03}{(.08)^2(200)}} = .15$$

$$OOIP = \frac{7758(40)(1.44)(1-.15)}{1.3} = 292 \text{ MBO/40}$$
$$= 7304 \text{ Bbl/ac}$$

If well recovered 77 MBO @ 15% Recovery factor
77,000 Bbl/7304/.15 = 70 ac.