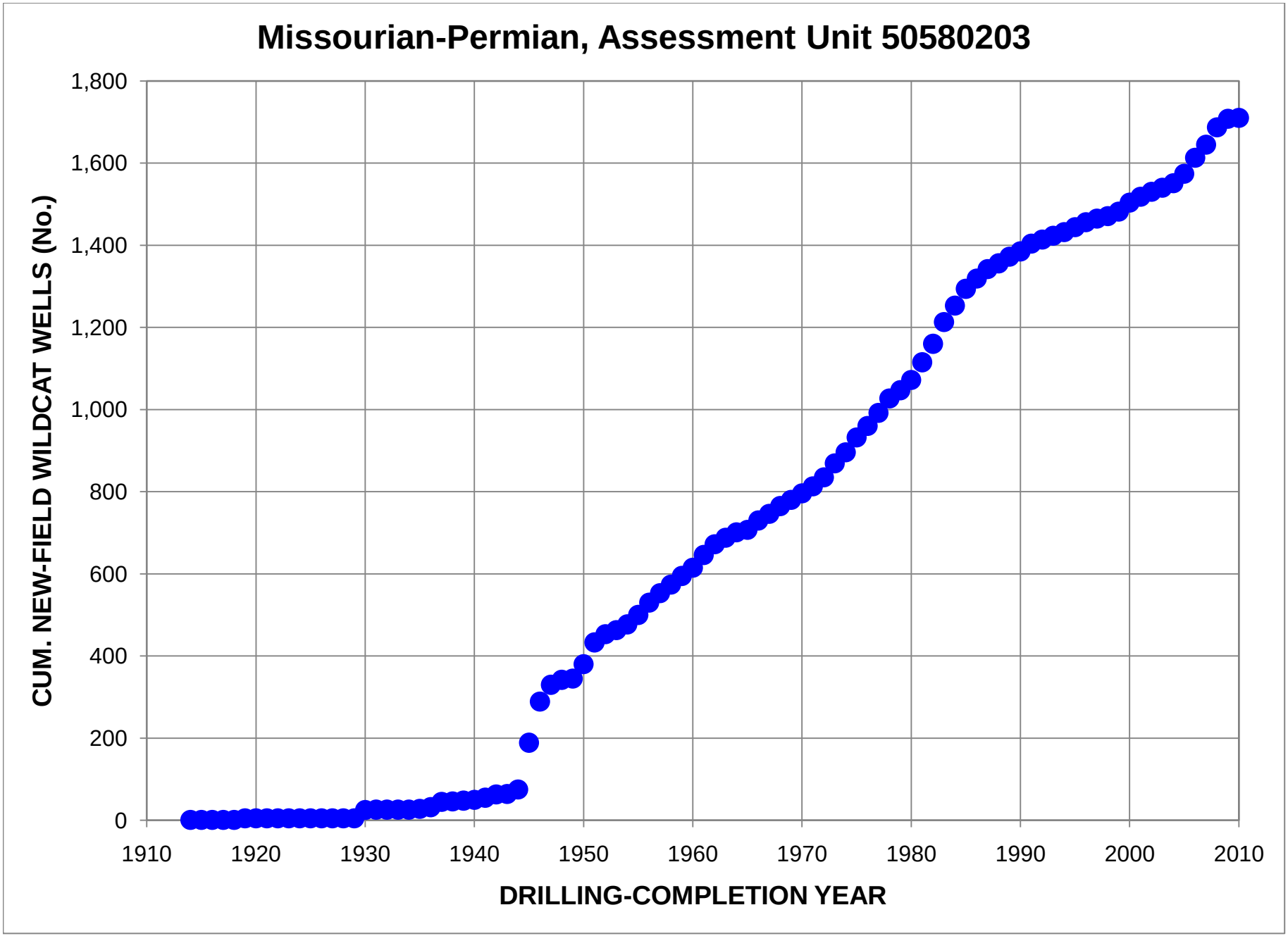
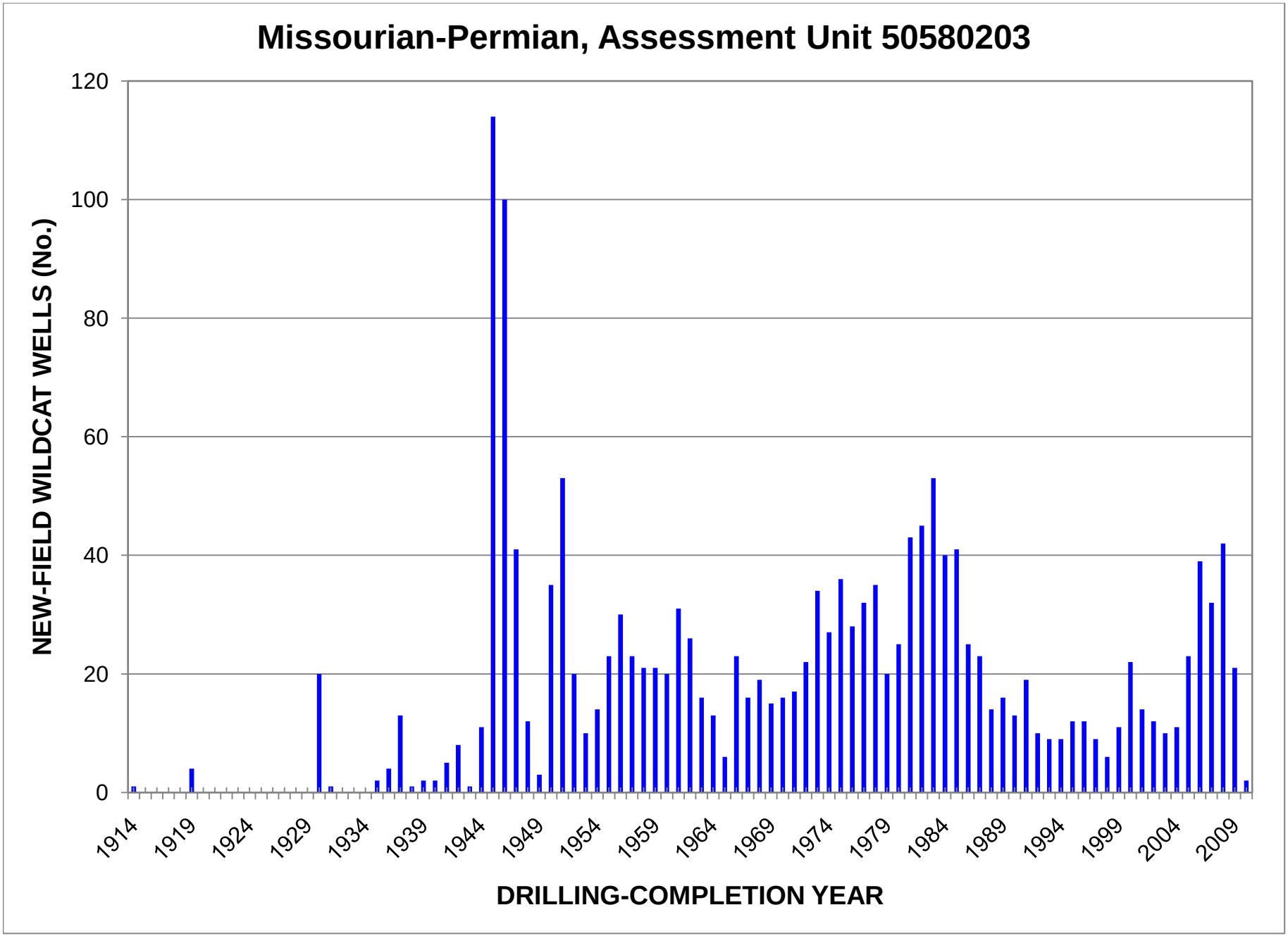
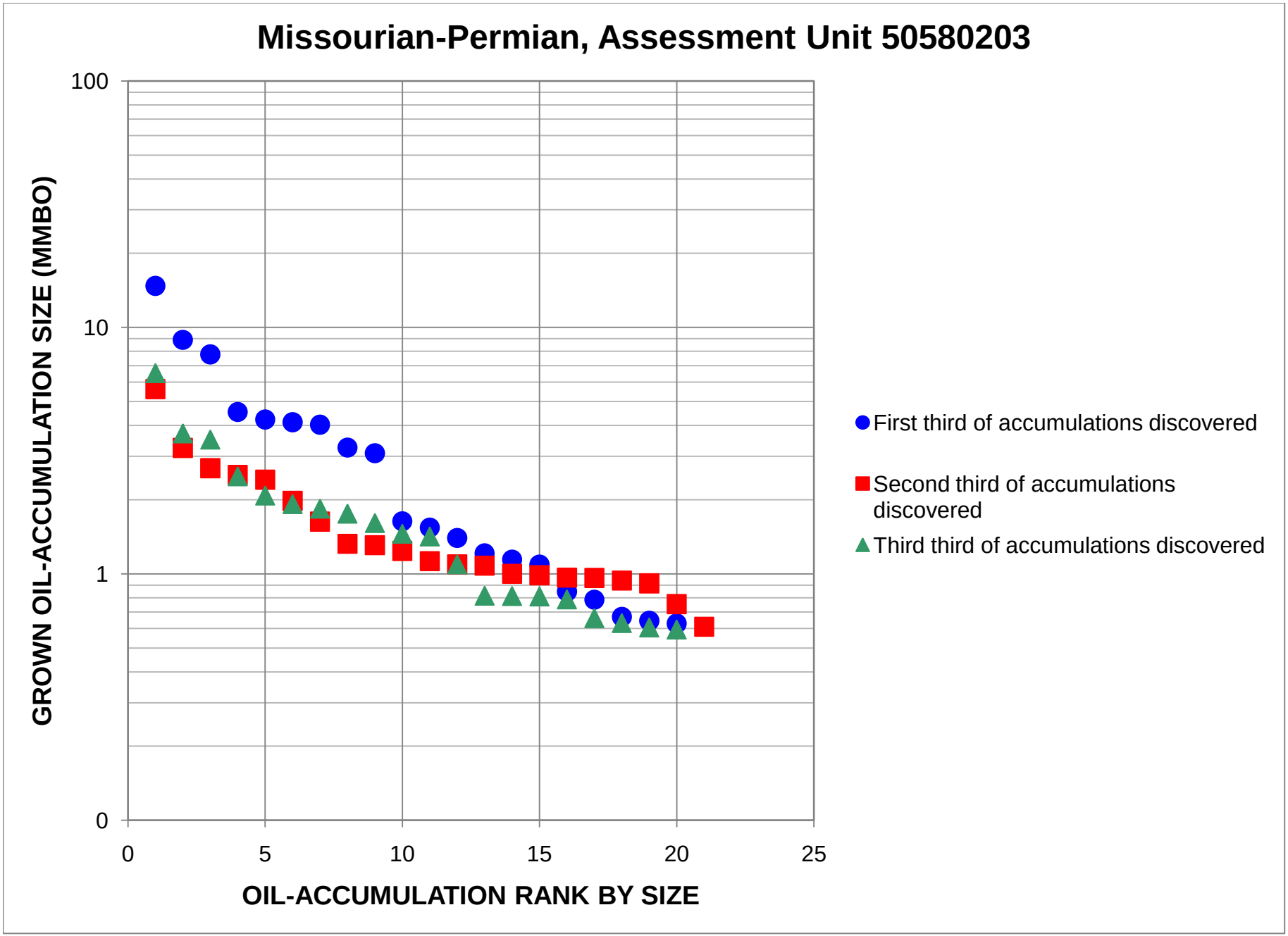
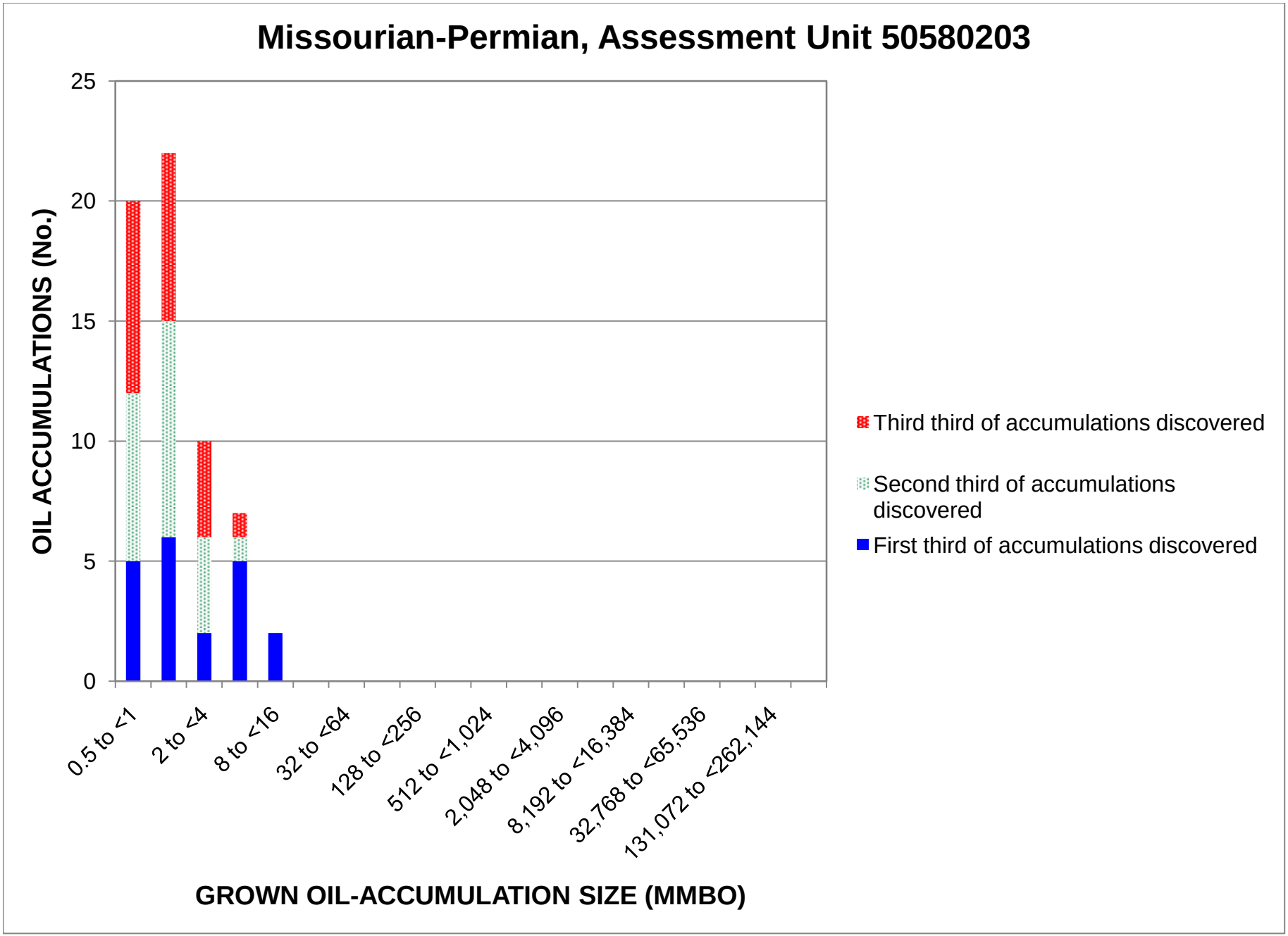
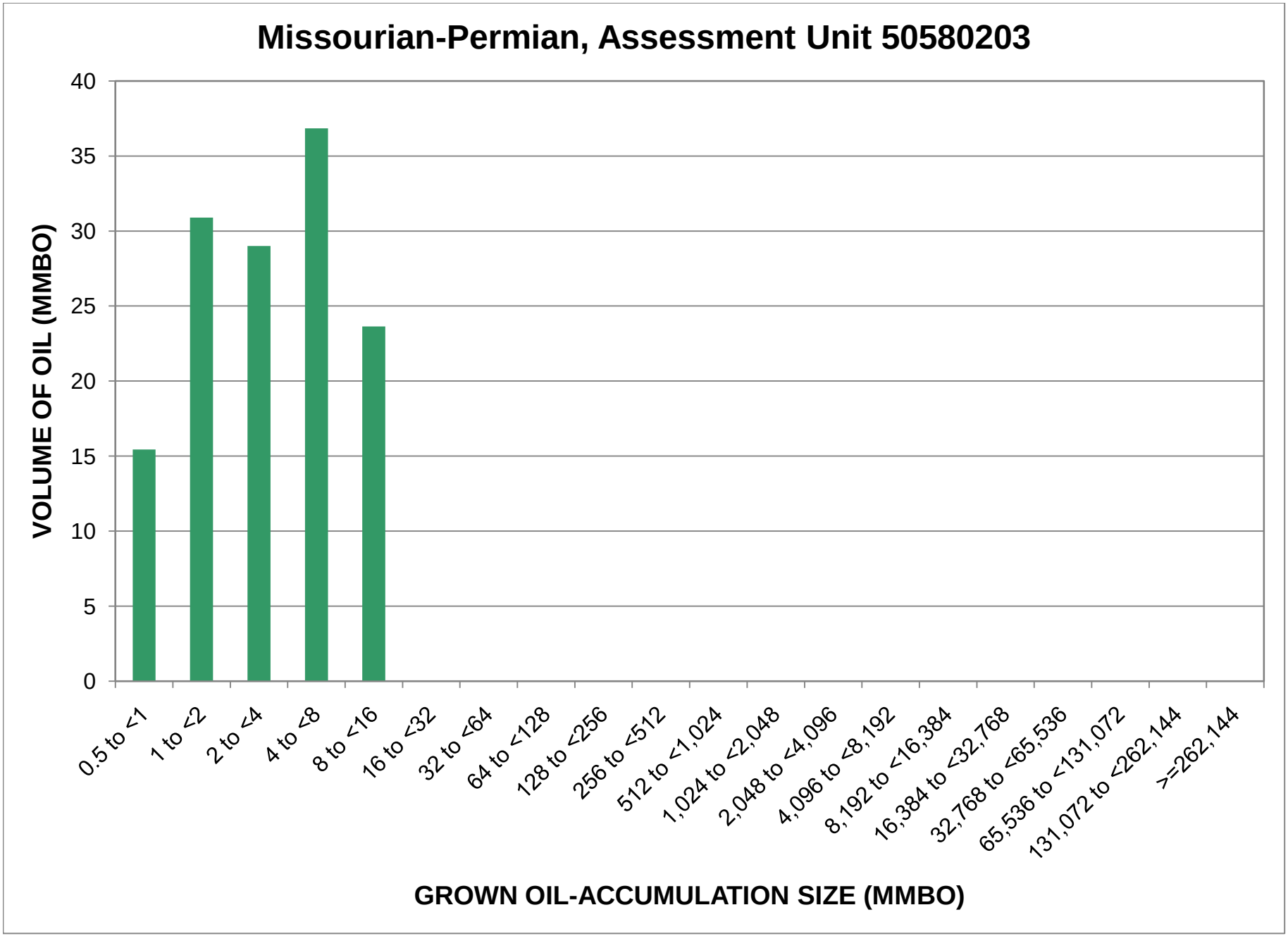
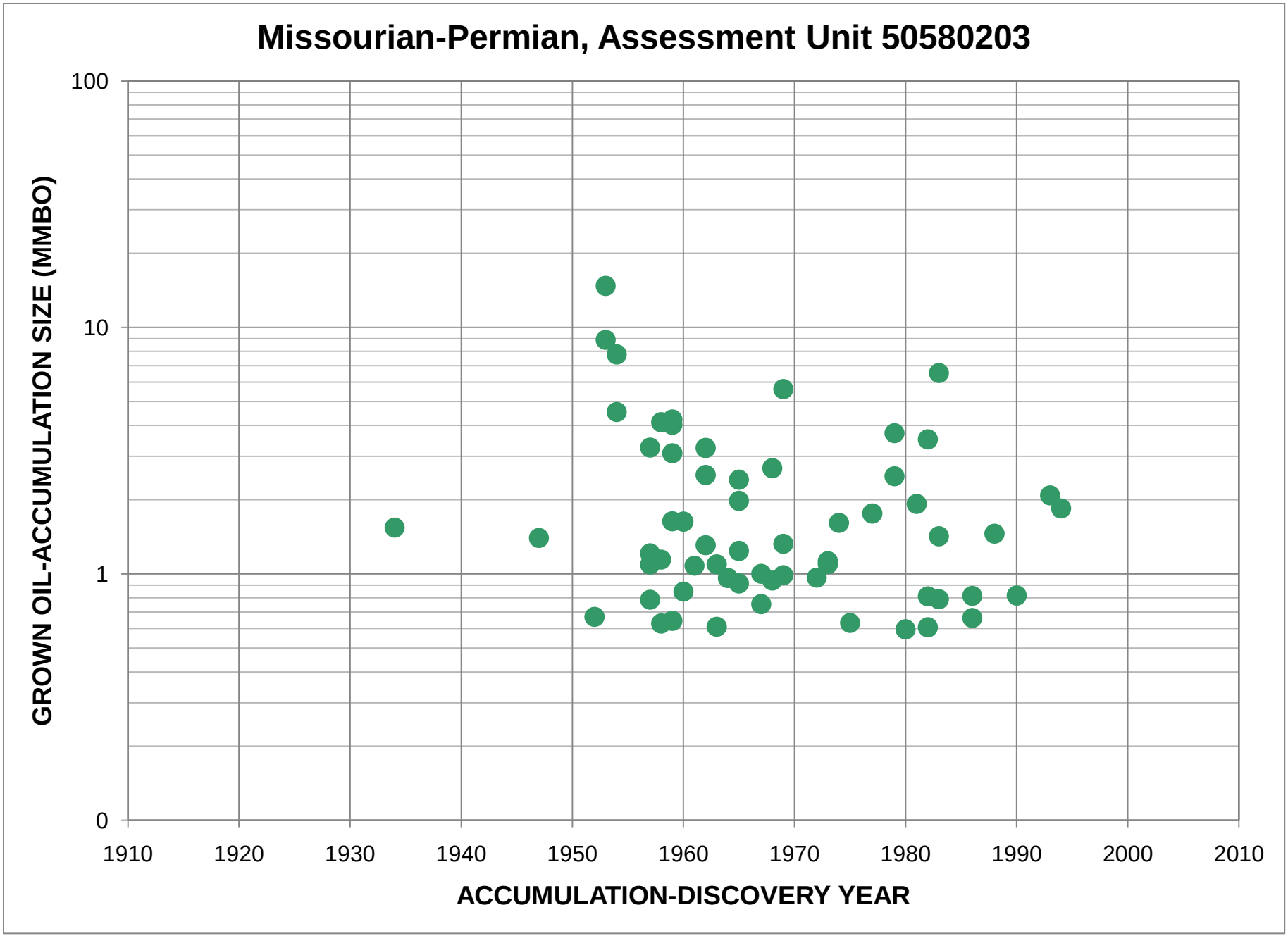

Missourian-Permian, Assessment Unit 50580203
CUM. NEW-FIELD WILDCAT WELLS (No.)
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
DRILLING-COMPLETION YEAR

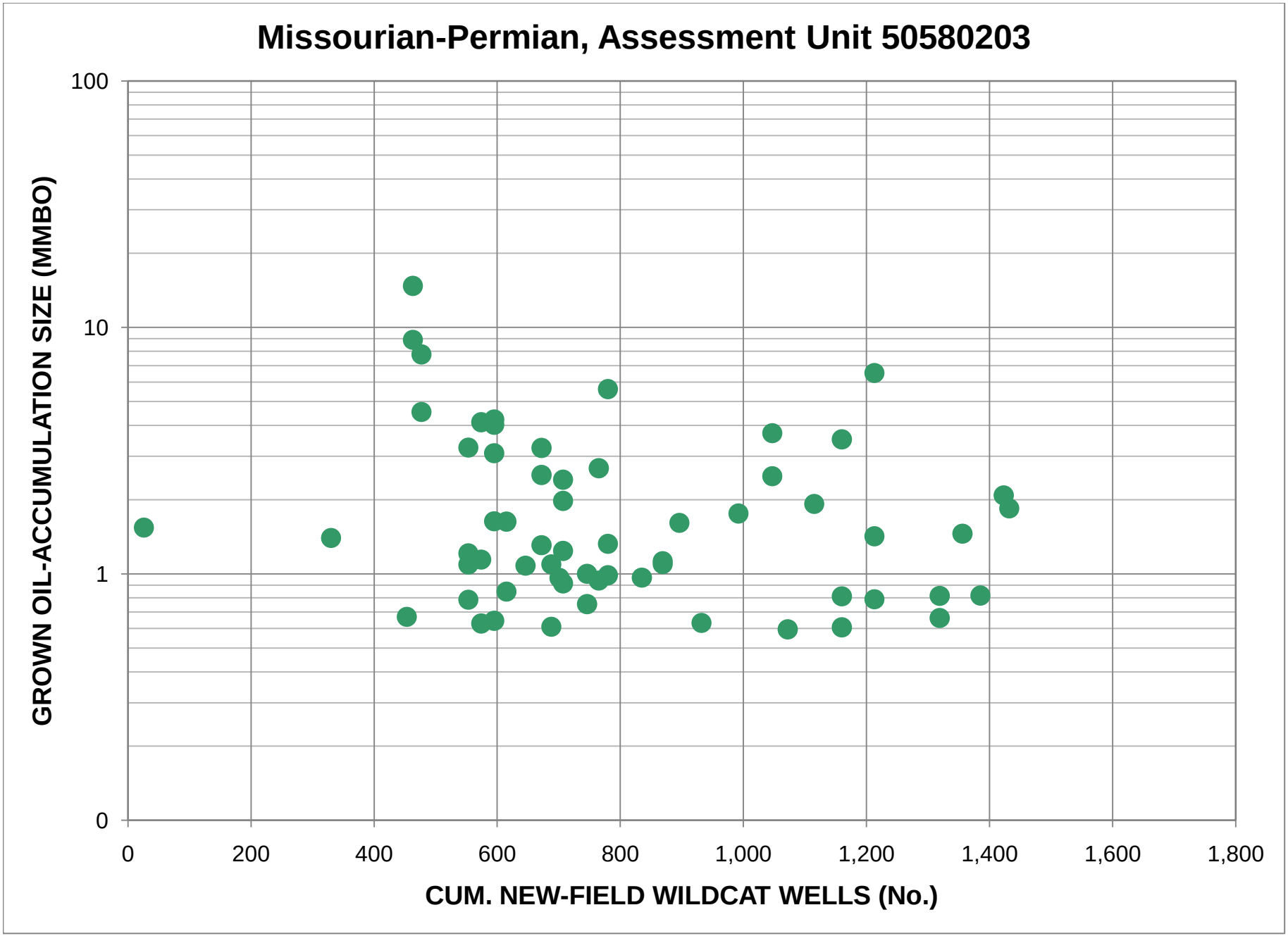

Missourian-Permian, Assessment Unit 50580203
NEW-FIELD WILDCAT WELLS (No.)
120
100
80
60
40
20
0
1914
1919
1924
1929
1934
1939
1944
1949
1954
1959
1964
1969
1974
1979
1984
1989
1994
1999
2004
2009
DRILLING-COMPLETION YEAR

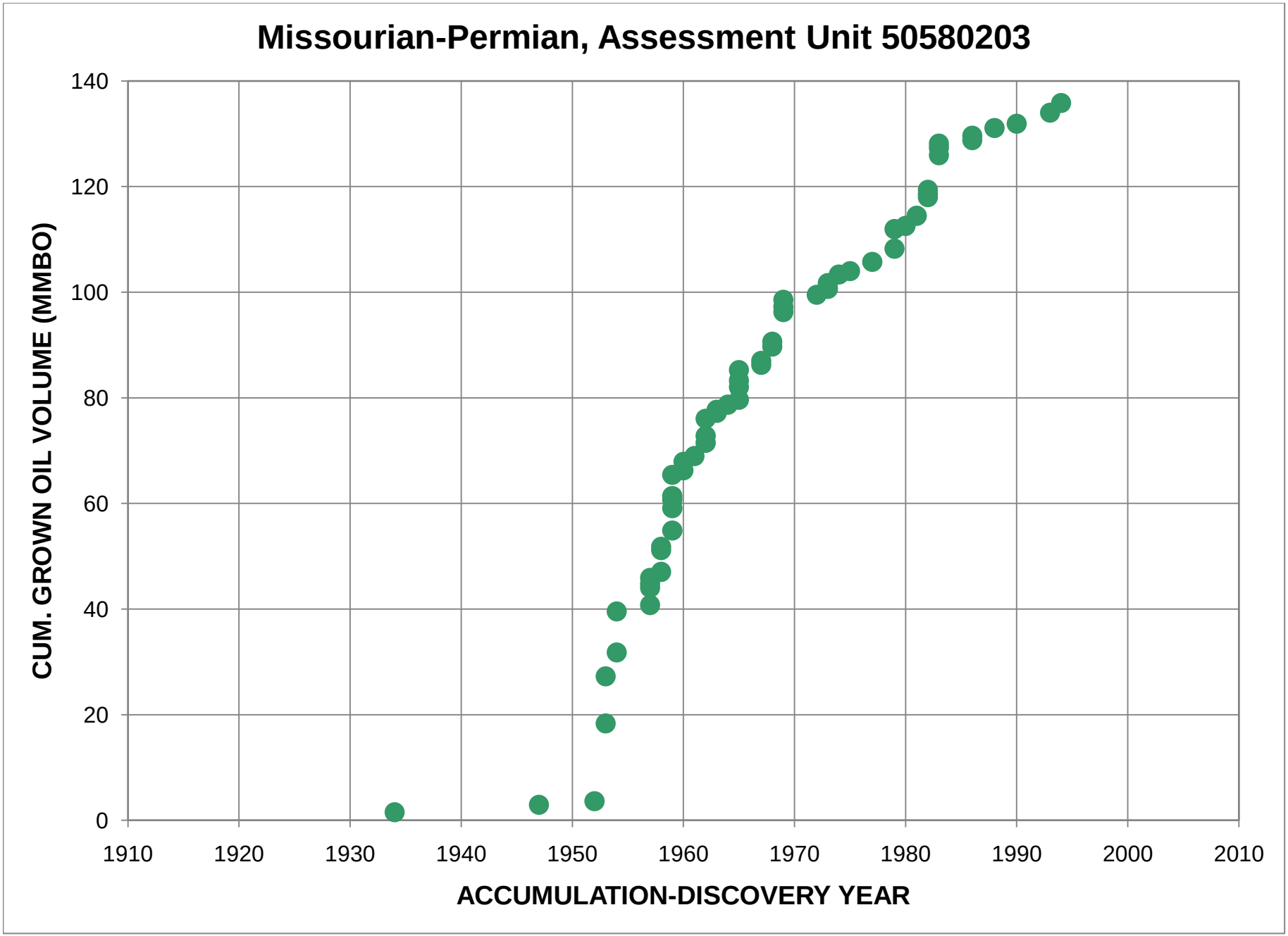

Missourian-Permian, Assessment Unit 50580203
GROWN OIL-ACCUMULATION SIZE (MMBO)
100
10
1
0
0
5
10
15
20
25
OIL-ACCUMULATION RANK BY SIZE
First third of accumulations discovered
Second third of accumulations discovered
Third third of accumulations discovered

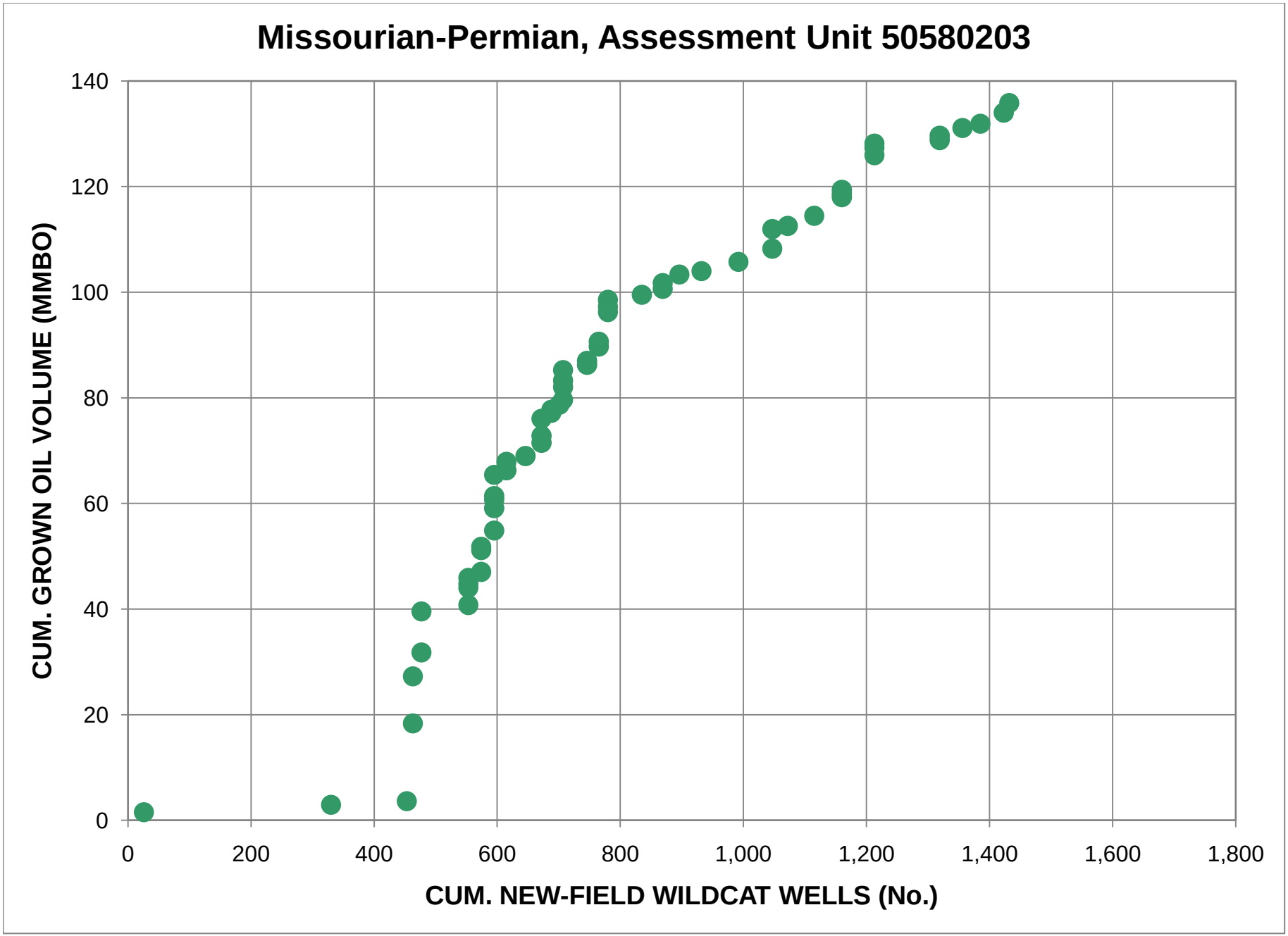

Missourian-Permian, Assessment Unit 50580203
OIL ACCUMULATIONS (No.)
25
20
15
10
5
0
0.5 to <1
2 to <4
8 to <16
32 to <64
128 to <256
512 to <1,024
2,048 to <4,096
8,192 to <16,384
32,768 to <65,536
131,072 to <262,144
GROWN OIL-ACCUMULATION SIZE (MMBO)
Third third of accumulations discovered
Second third of accumulations discovered
First third of accumulations discovered

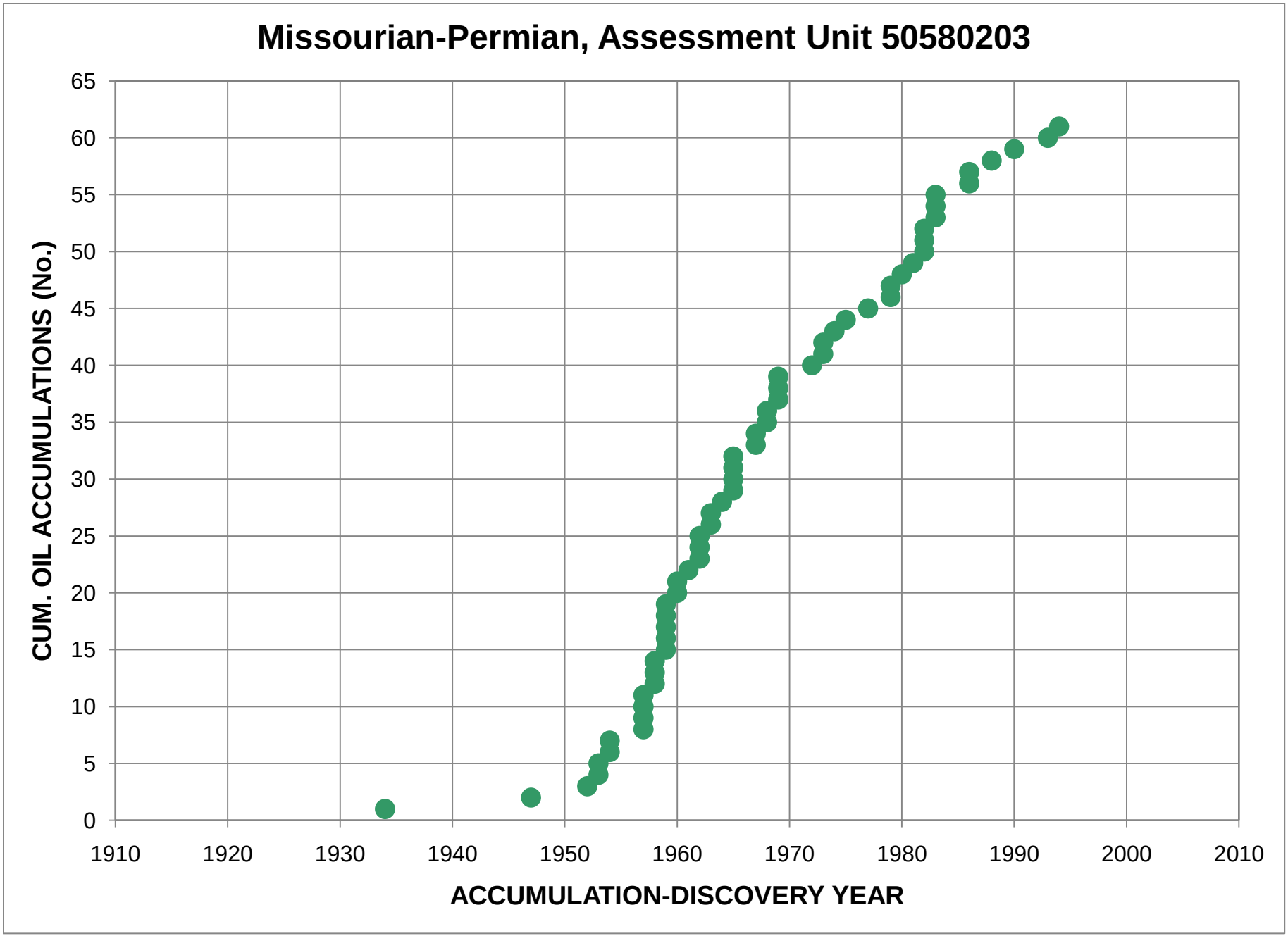

Missourian-Permian, Assessment Unit 50580203
VOLUME OF OIL (MMBO)
40
35
30
25
20
15
10
5
0
0.5 to <1
1 to <2
2 to <4
4 to <8
8 to <16
16 to <32
32 to <64
64 to <128
128 to <256
256 to <512
512 to <1,024
1,024 to <2,048
2,048 to <4,096
4,096 to <8,192
8,192 to <16,384
16,384 to <32,768
32,768 to <65,536
65,536 to <131,072
131,072 to <262,144
>=262,144
GROWN OIL-ACCUMULATION SIZE (MMBO)

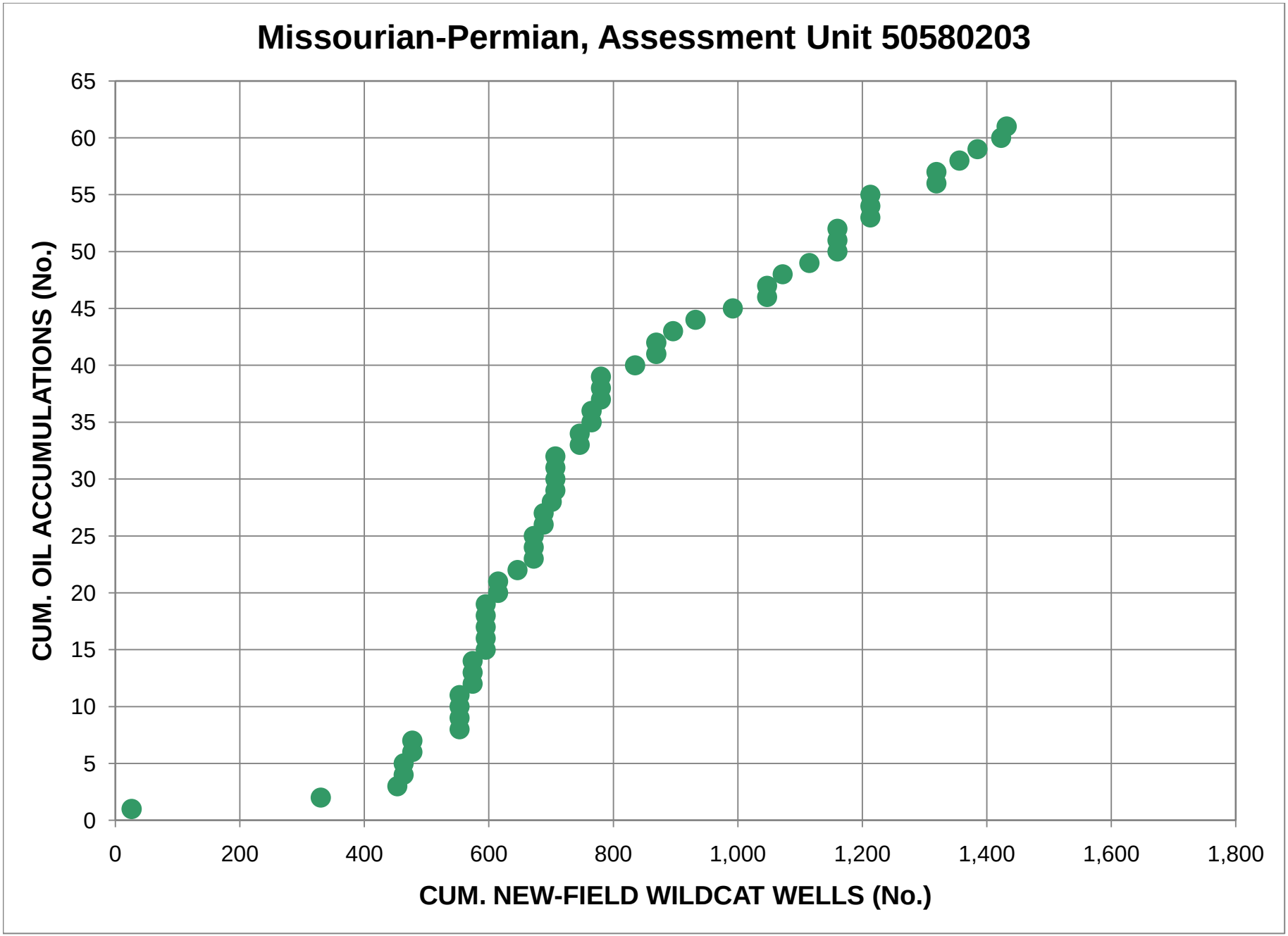

Missourian-Permian, Assessment Unit 50580203
GROWN OIL-ACCUMULATION SIZE (MMBO)
100
10
1
0
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
ACCUMULATION-DISCOVERY YEAR

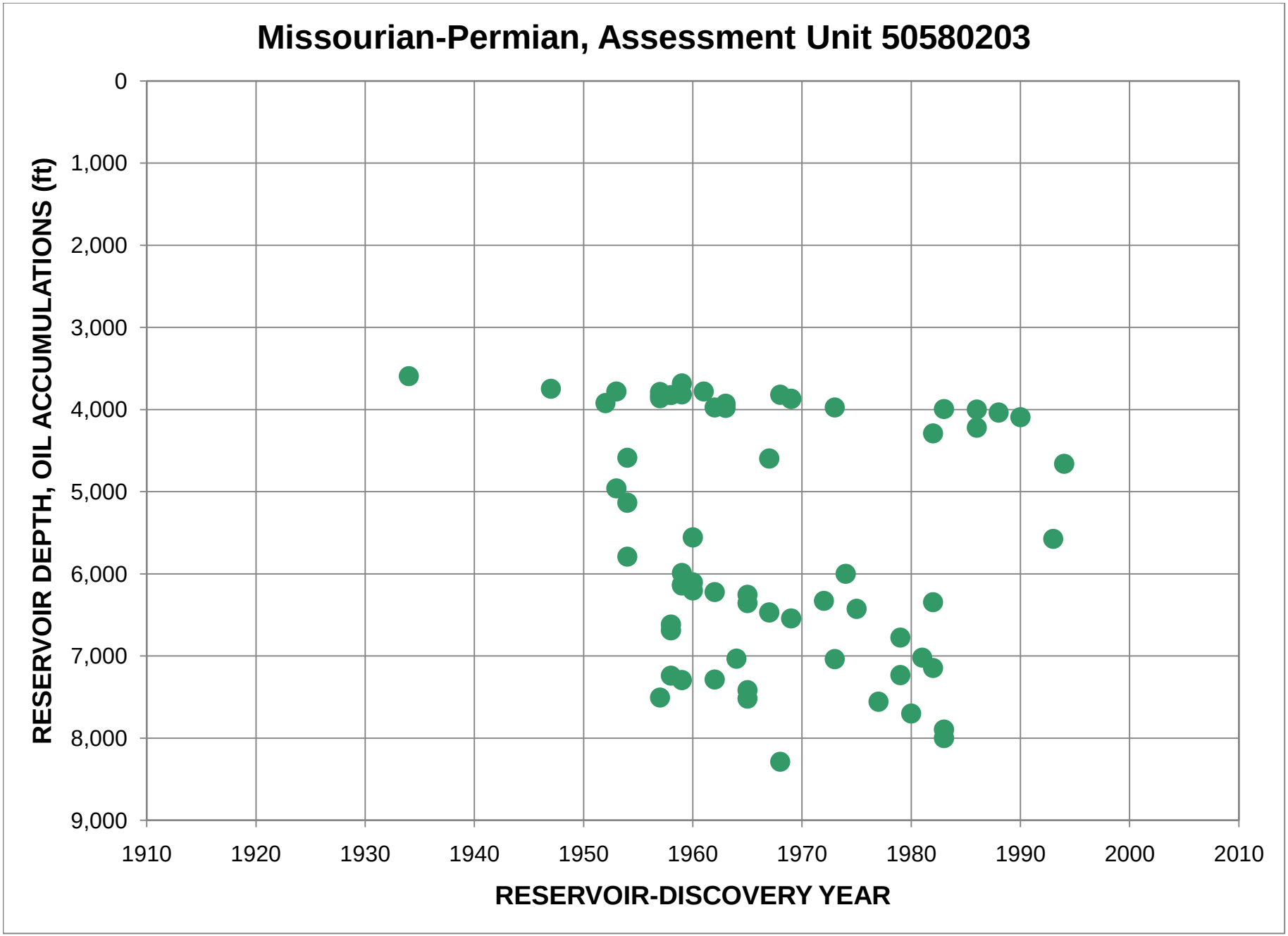

Missourian-Permian, Assessment Unit 50580203
GROWN OIL-ACCUMULATION SIZE (MMBO)
100
10
1
0
0
200
400
600
800
1,000
1,200
1,400
1,600
1,800
CUM. NEW-FIELD WILDCAT WELLS (No.)

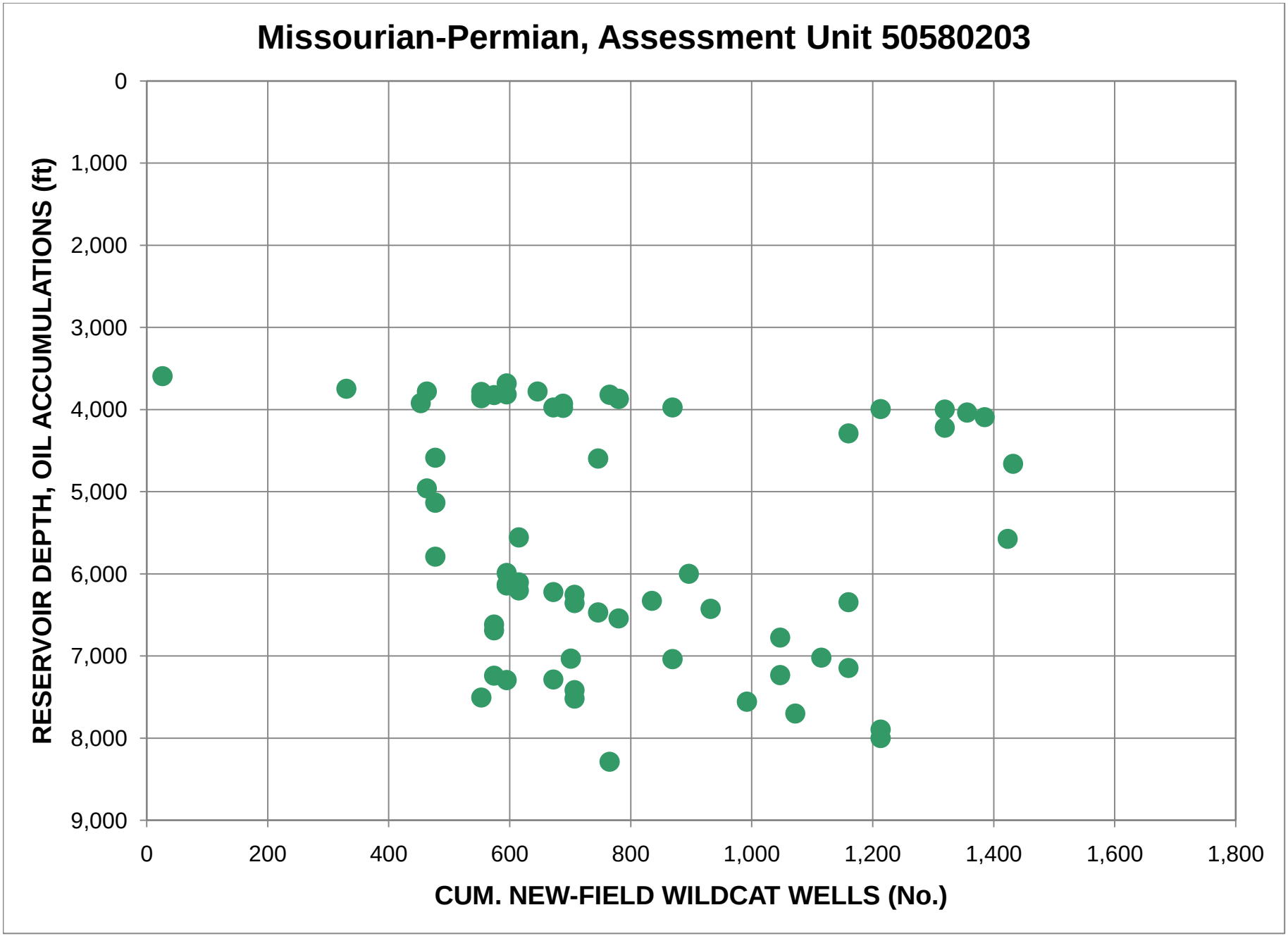

Missourian-Permian, Assessment Unit 50580203
CUM. GROWN OIL VOLUME (MMBO)
0
20
40
60
80
100
120
140
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
ACCUMULATION-DISCOVERY YEAR

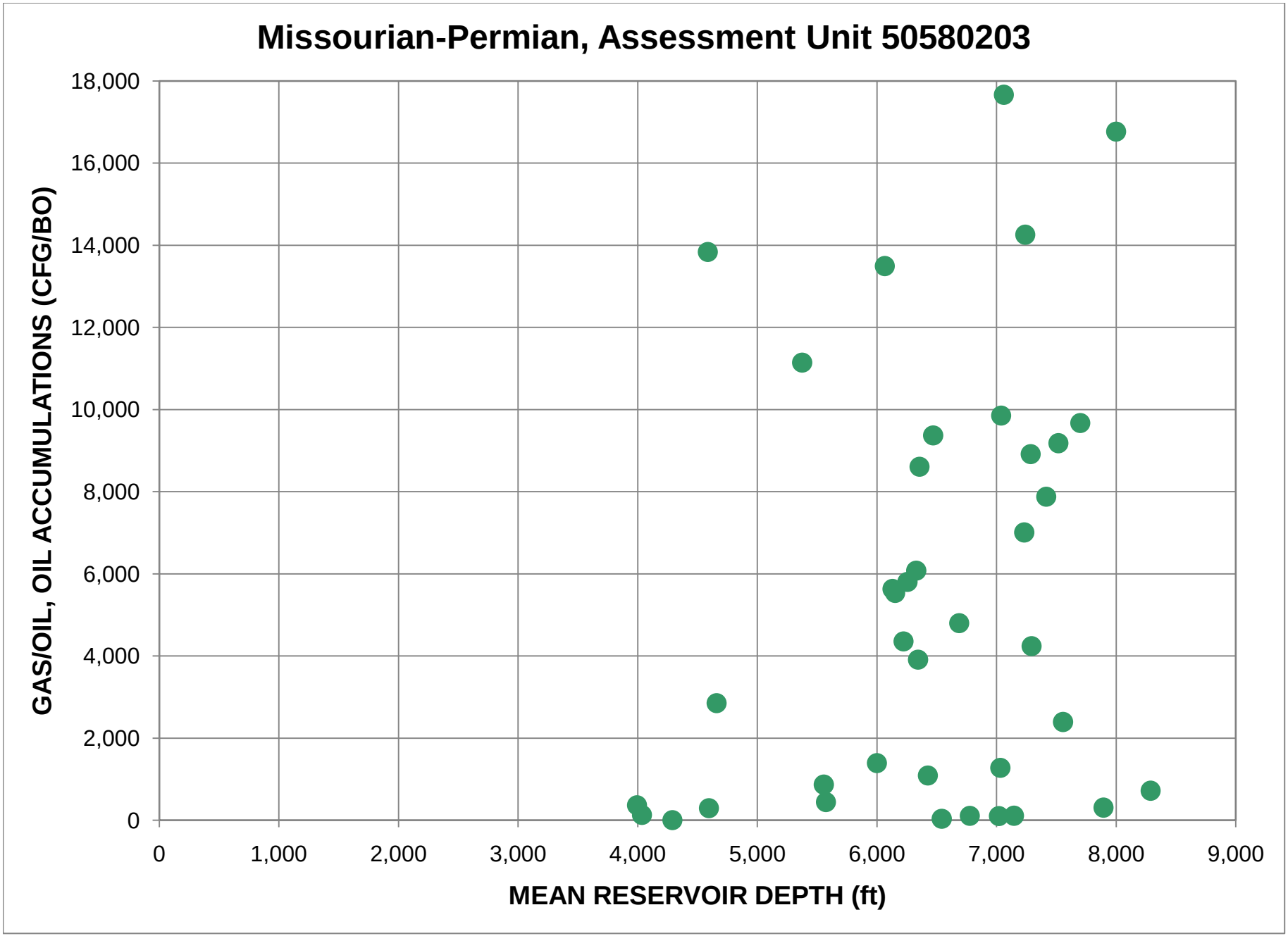

Missourian-Permian, Assessment Unit 50580203
CUM. GROWN OIL VOLUME (MMBO)
0
20
40
60
80
100
120
140
0
200
400
600
800
1,000
1,200
1,400
1,600
1,800
CUM. NEW-FIELD WILDCAT WELLS (No.)

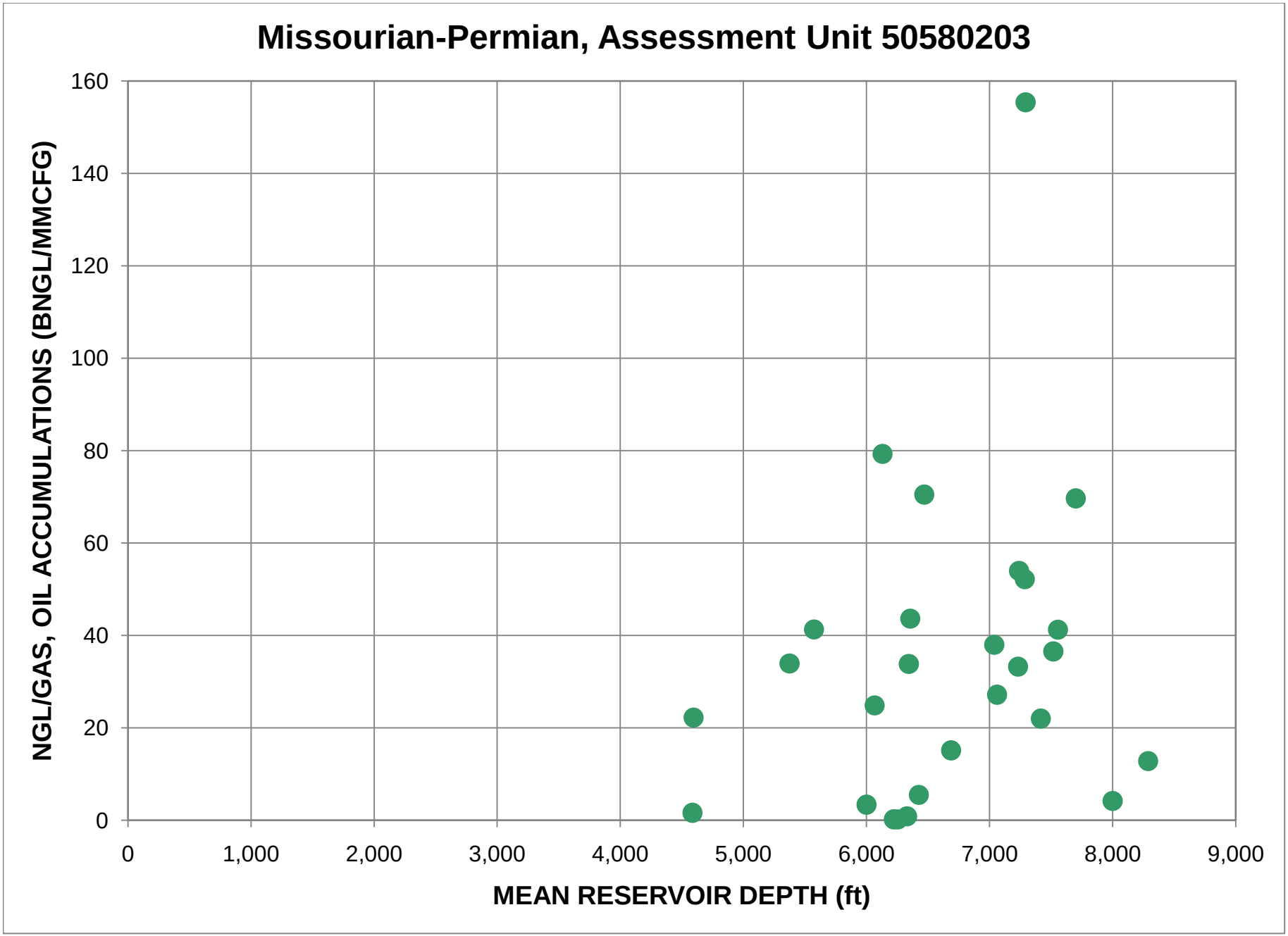

Missourian-Permian, Assessment Unit 50580203
CUM. OIL ACCUMULATIONS (No.)
65
60
55
50
45
40
35
30
25
20
15
10
5
0
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
ACCUMULATION-DISCOVERY YEAR

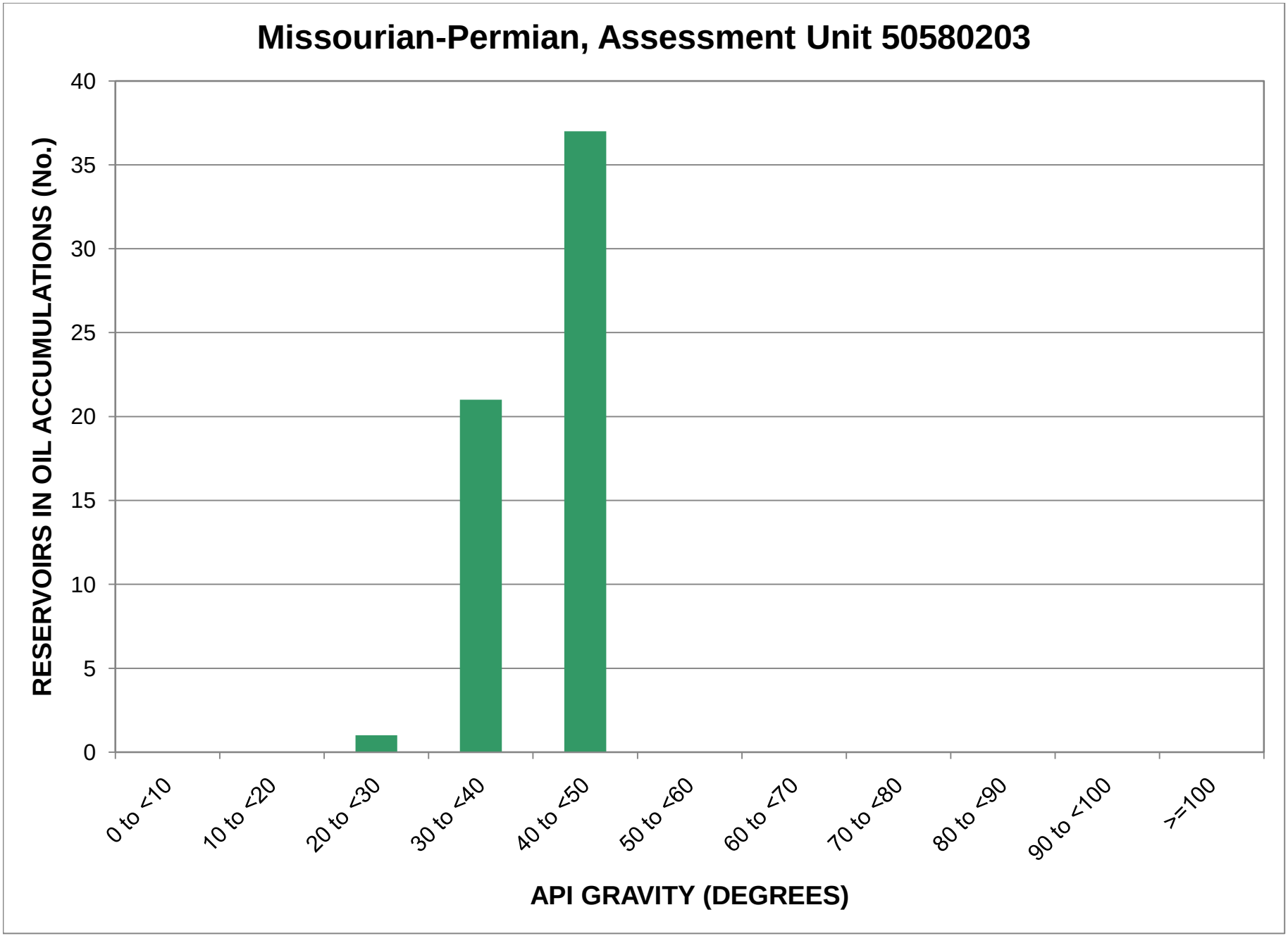

Missourian-Permian, Assessment Unit 50580203
CUM. OIL ACCUMULATIONS (No.)
0
5
10
15
20
25
30
35
40
45
50
55
60
65
0
200
400
600
800
1,000
1,200
1,400
1,600
1,800
CUM. NEW-FIELD WILDCAT WELLS (No.)

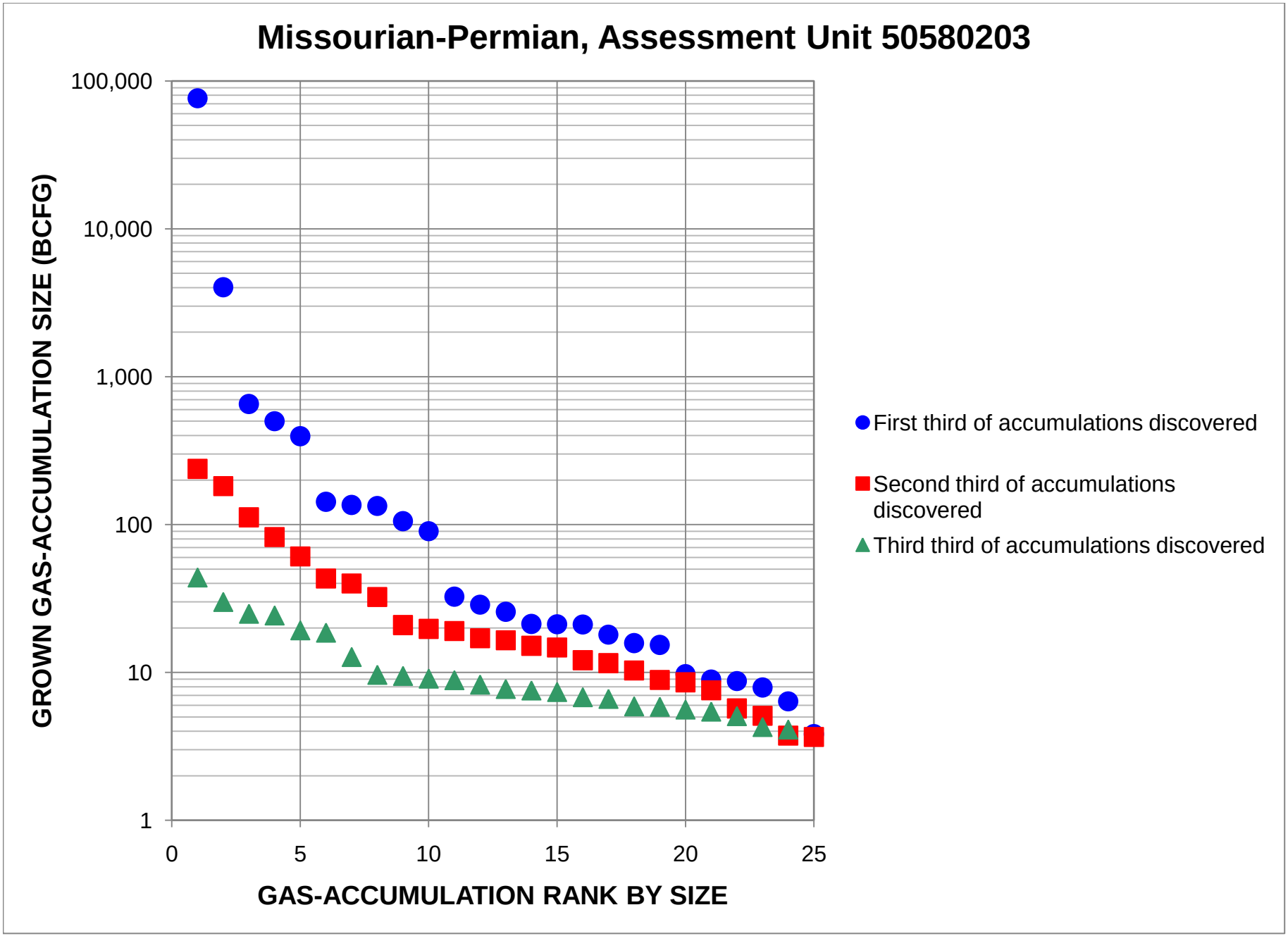

Missourian-Permian, Assessment Unit 50580203
RESERVOIR DEPTH, OIL ACCUMULATIONS (ft)
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
RESERVOIR-DISCOVERY YEAR

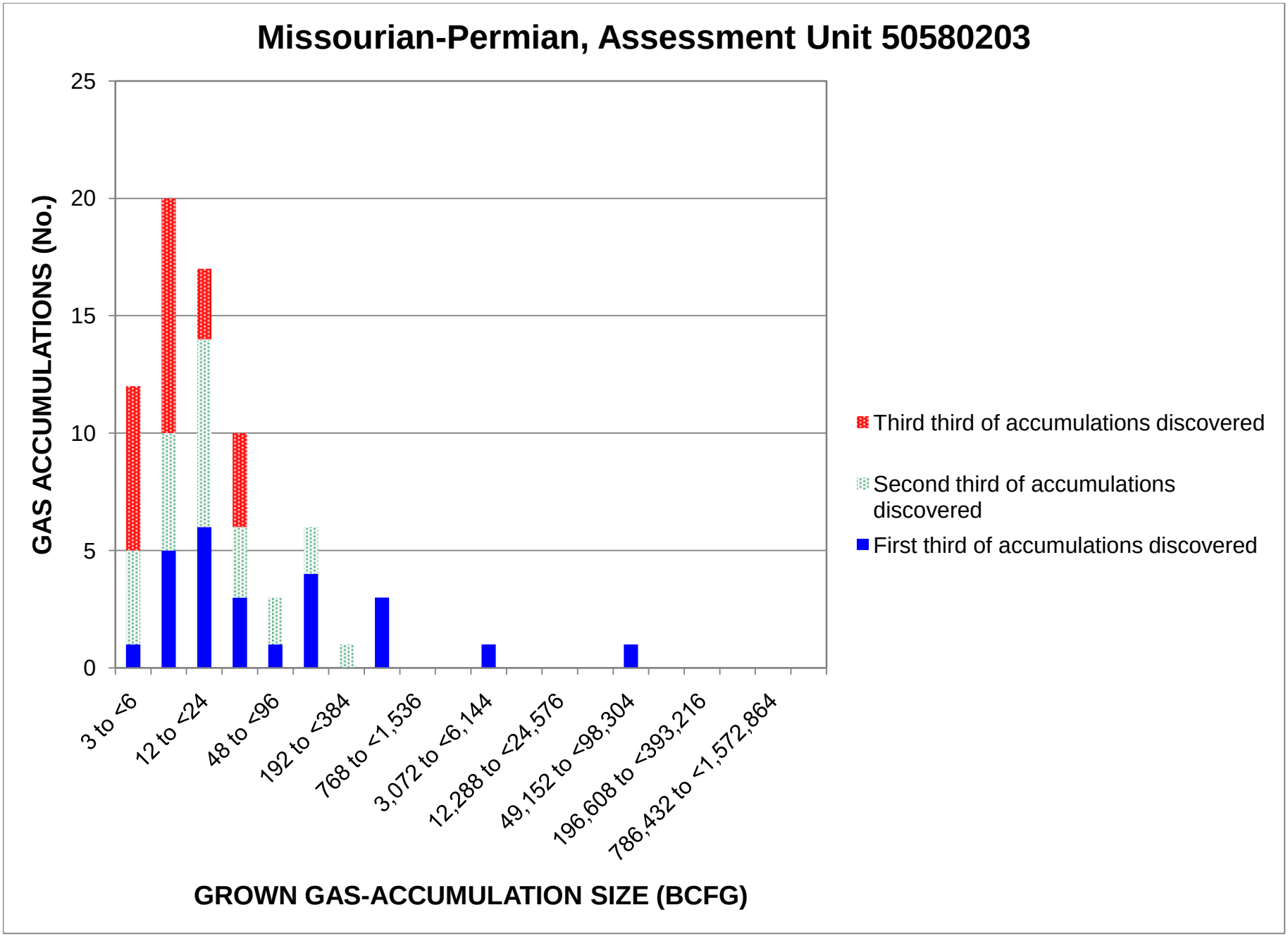

Missourian-Permian, Assessment Unit 50580203
RESERVOIR DEPTH, OIL ACCUMULATIONS (ft)
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
0
200
400
600
800
1,000
1,200
1,400
1,600
1,800
CUM. NEW-FIELD WILDCAT WELLS (No.)

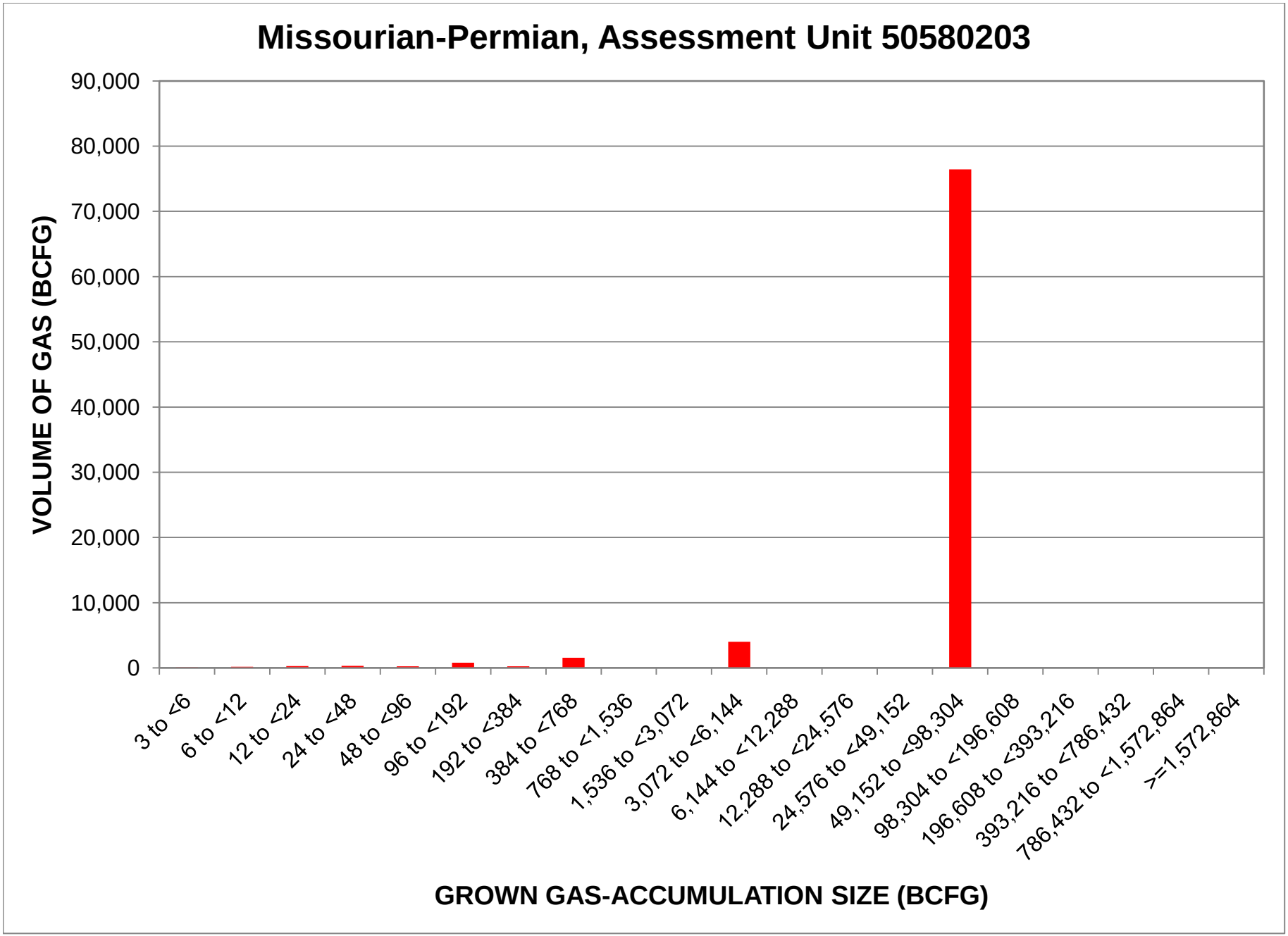

Missourian-Permian, Assessment Unit 50580203
GAS/OIL, OIL ACCUMULATIONS (CFG/BO)
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
MEAN RESERVOIR DEPTH (ft)

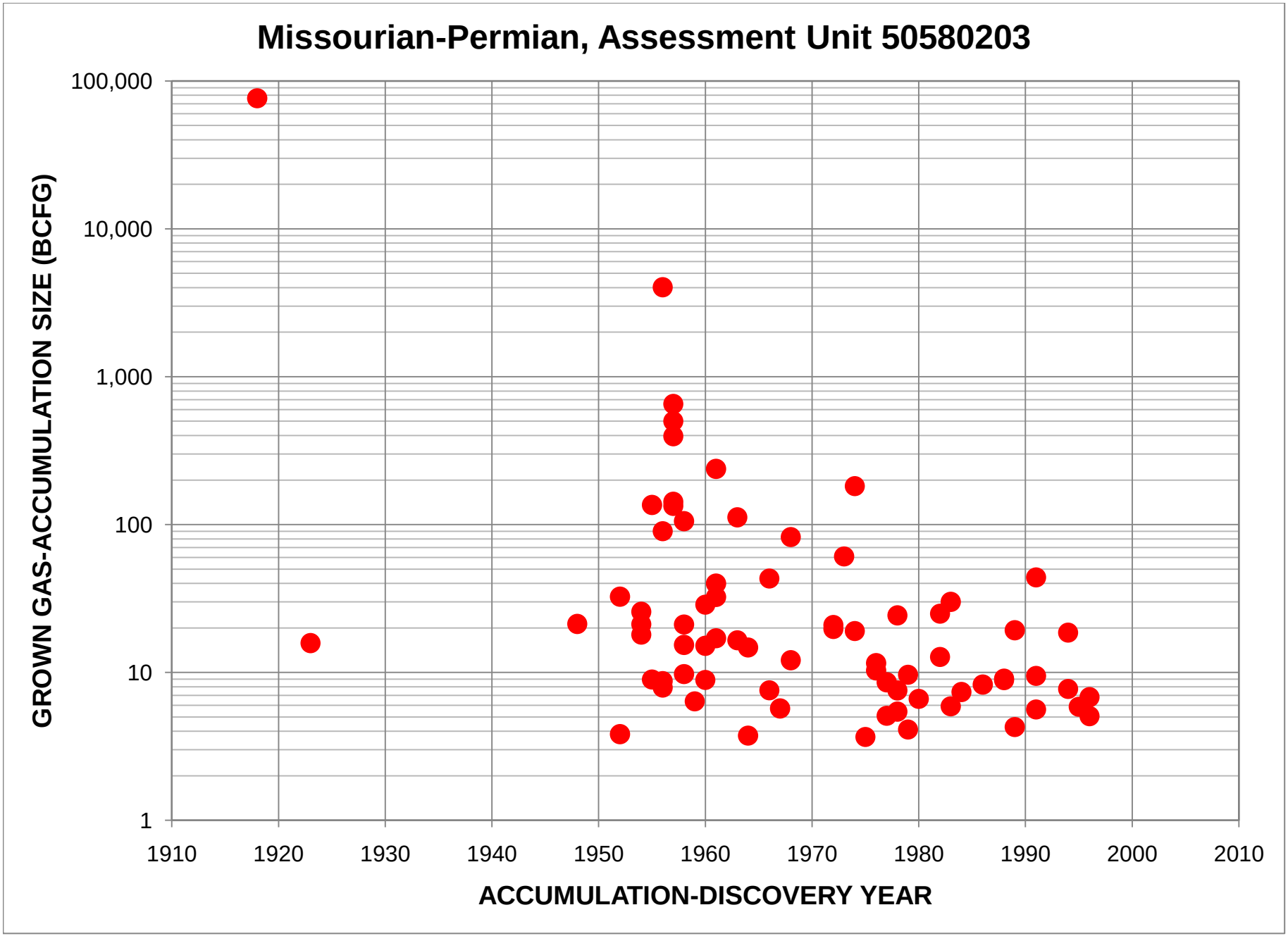

Missourian-Permian, Assessment Unit 50580203
NGL/GAS, OIL ACCUMULATIONS (BNGL/MMCFG)
160
140
120
100
80
60
40
20
0
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
MEAN RESERVOIR DEPTH (ft)

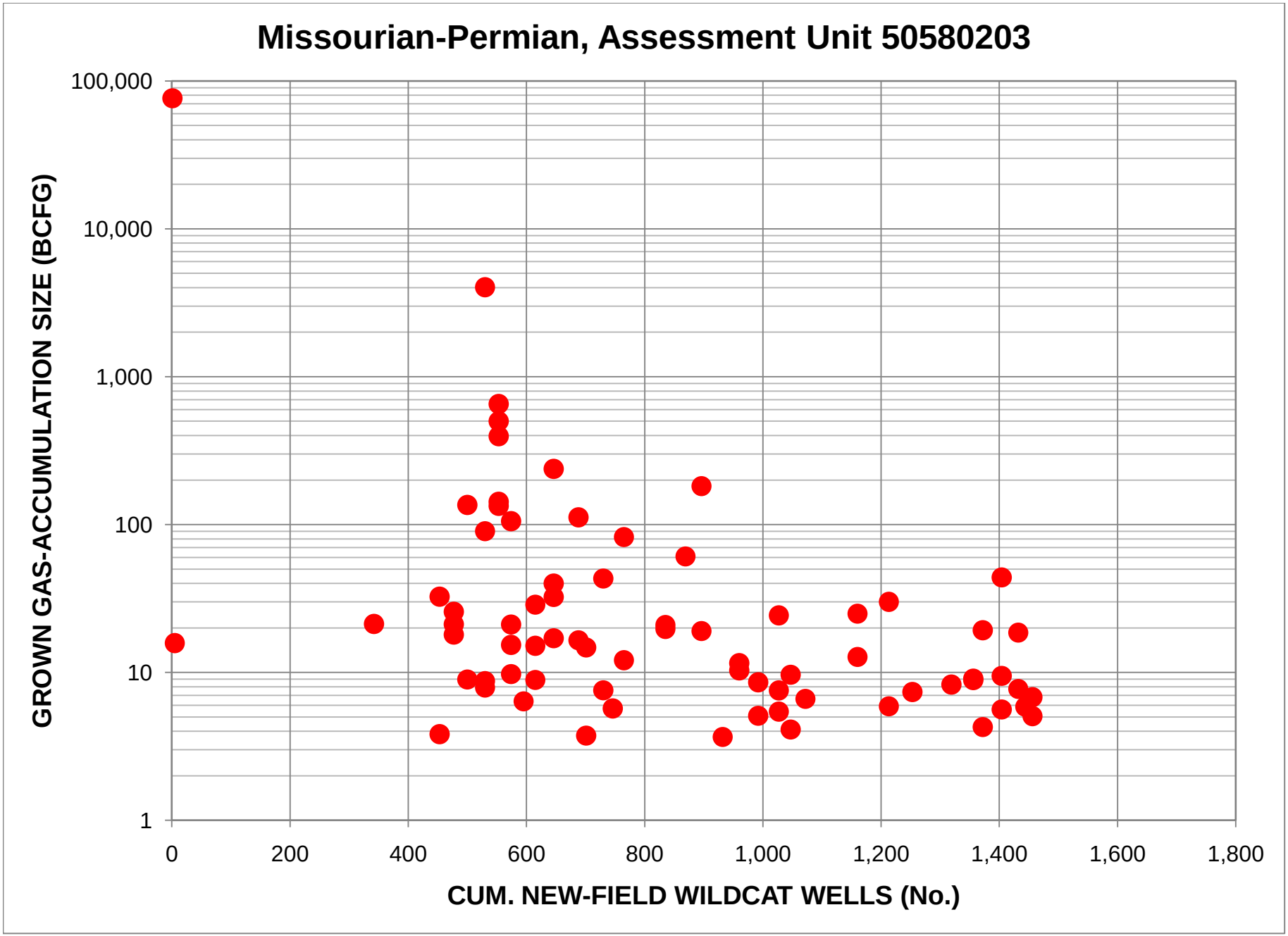

Missourian-Permian, Assessment Unit 50580203
RESERVOIRS IN OIL ACCUMULATIONS (No.)
40
35
30
25
20
15
10
5
0
0 to <10
10 to <20
20 to <30
30 to <40
40 to <50
50 to <60
60 to <70
70 to <80
80 to <90
90 to <100
>=100
API GRAVITY (DEGREES)

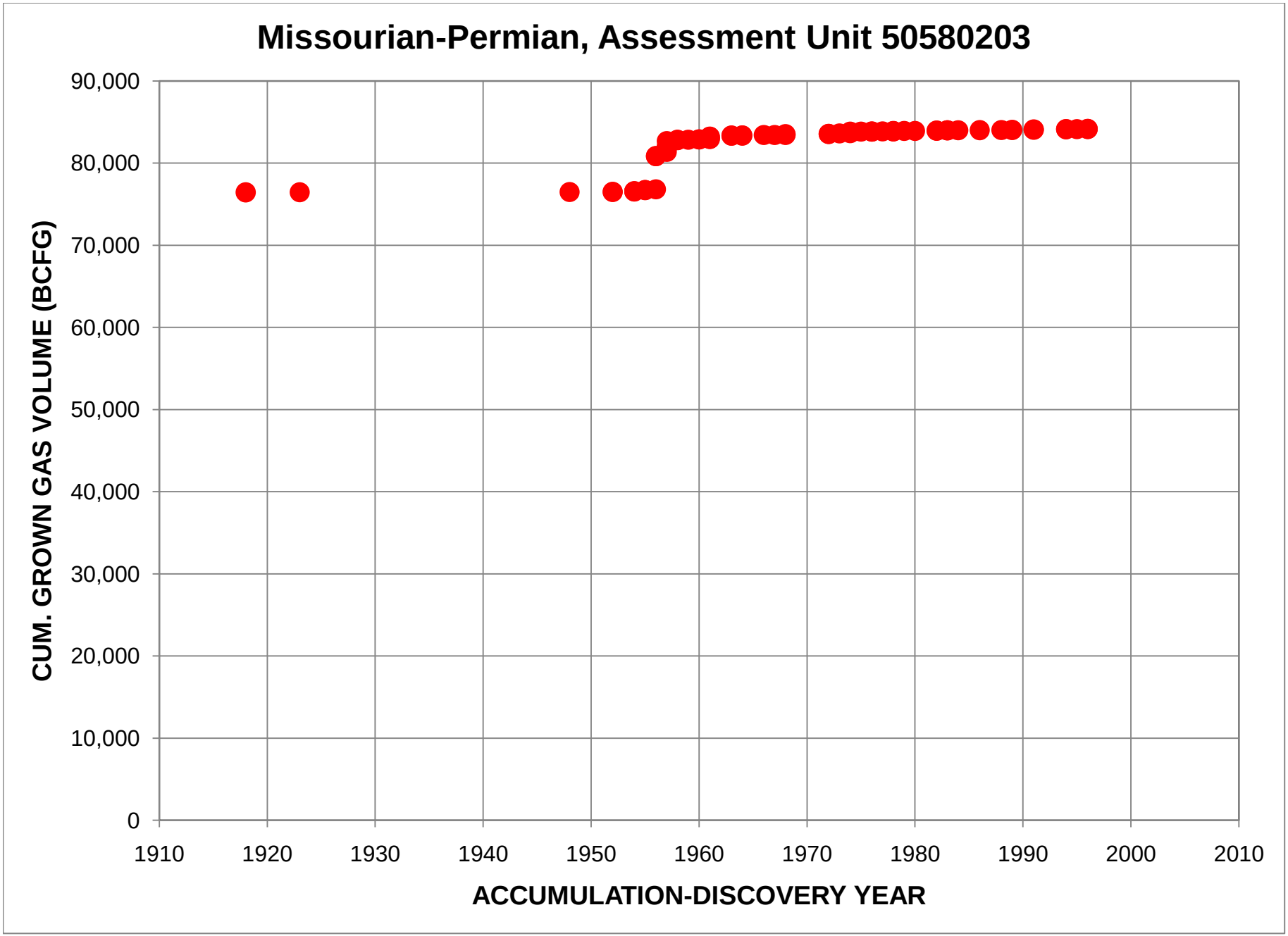

Missourian-Permian, Assessment Unit 50580203
GROWN GAS-ACCUMULATION SIZE (BCFG)
100,000
10,000
1,000
100
10
1
0
5
10
15
20
25
GAS-ACCUMULATION RANK BY SIZE
First third of accumulations discovered
Second third of accumulations discovered
Third third of accumulations discovered

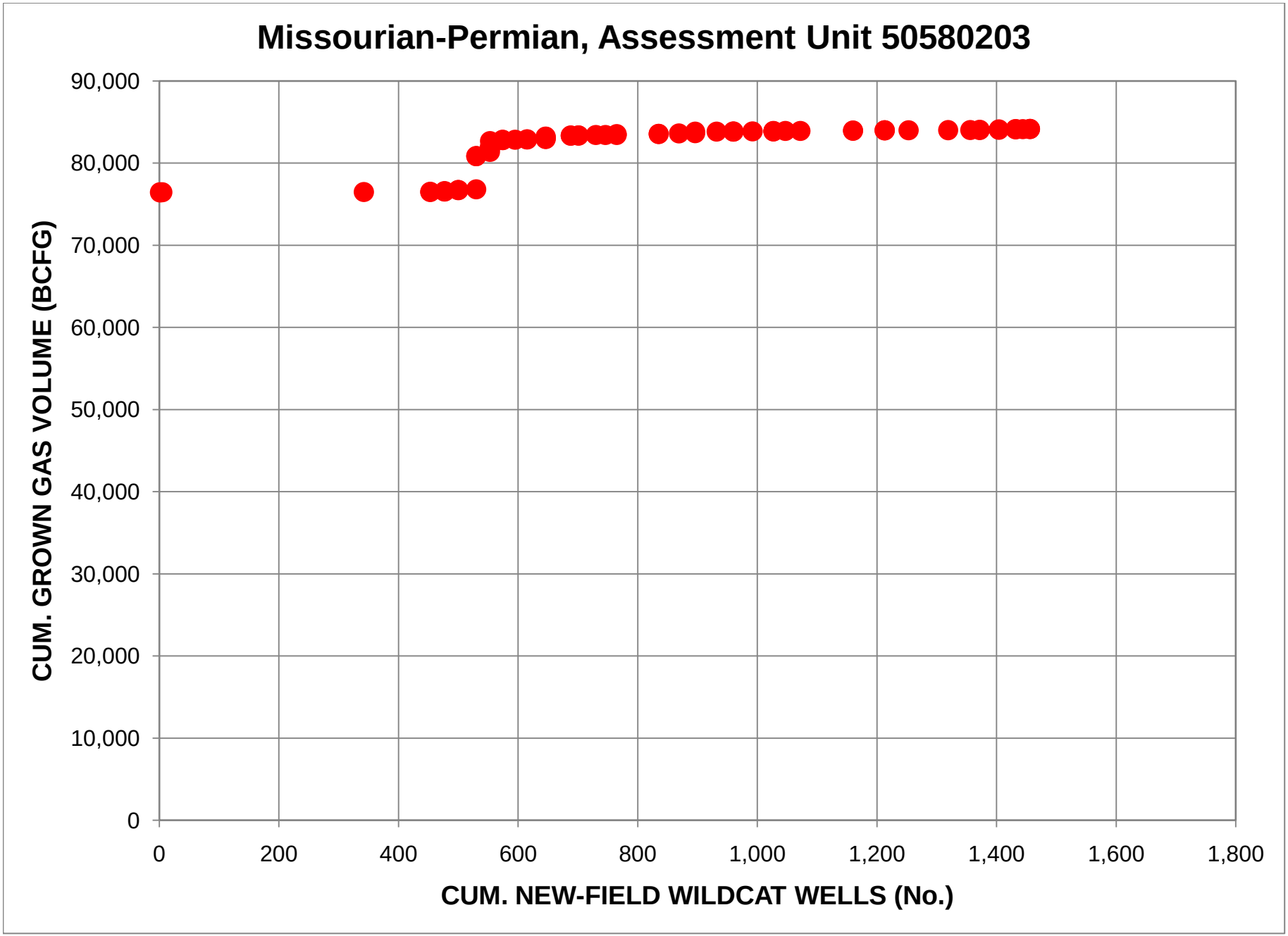

Missourian-Permian, Assessment Unit 50580203
GAS ACCUMULATIONS (No.)
25
20
15
10
5
0
3 to <6
12 to <24
48 to <96
192 to <384
768 to <1,536
3,072 to <6,144
12,288 to <24,576
49,152 to <98,304
196,608 to <393,216
786,432 to <1,572,864
GROWN GAS-ACCUMULATION SIZE (BCFG)
Third third of accumulations discovered
Second third of accumulations discovered
First third of accumulations discovered

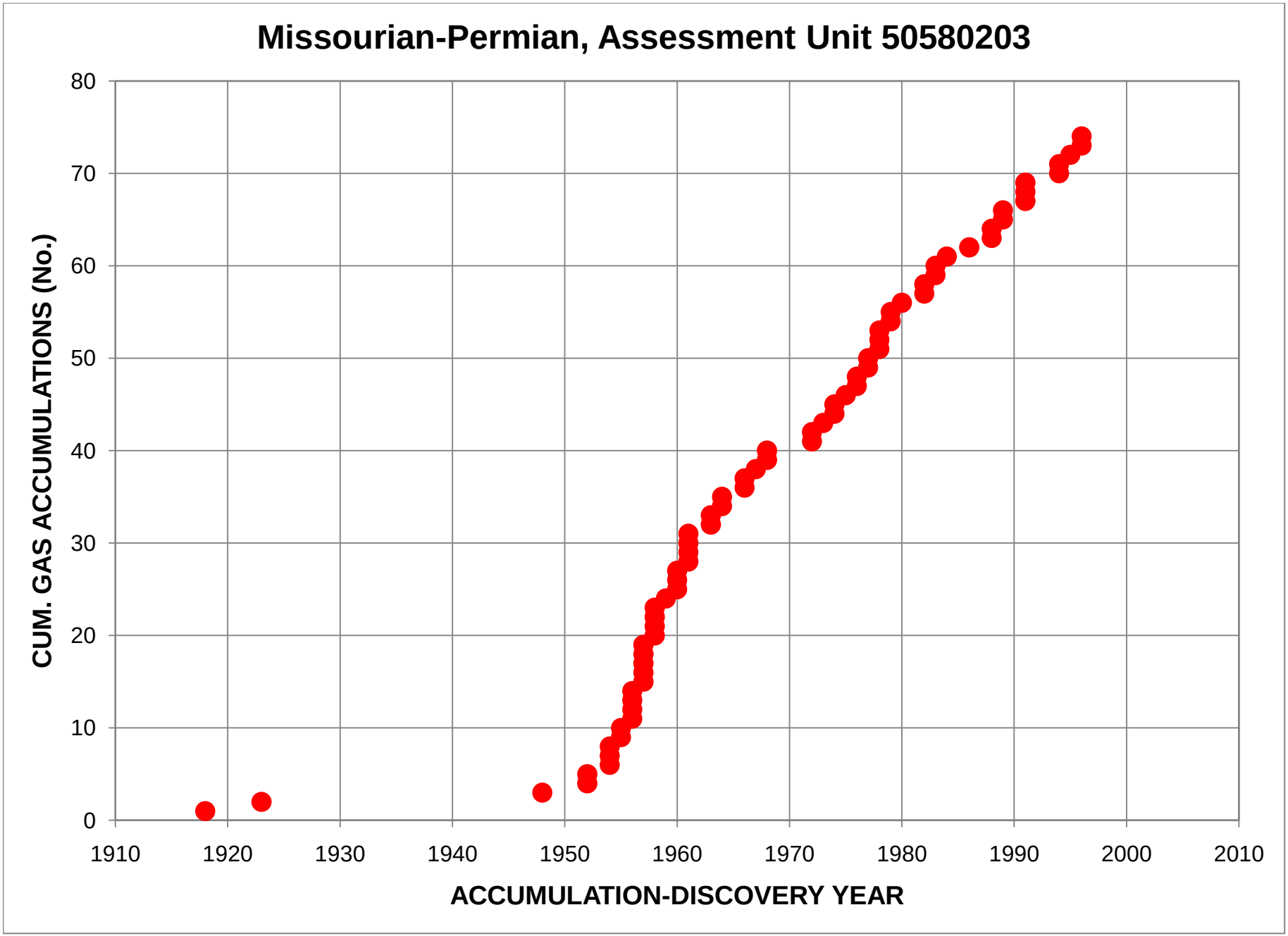

Missourian-Permian, Assessment Unit 50580203
VOLUME OF GAS (BCFG)
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
3 to <6
6 to <12
12 to <24
24 to <48
48 to <96
96 to <192
192 to <384
384 to <768
768 to <1,536
1,536 to <3,072
3,072 to <6,144
6,144 to <12,288
12,288 to <24,576
24,576 to <49,152
49,152 to <98,304
98,304 to <196,608
196,608 to <393,216
393,216 to <786,432
786,432 to <1,572,864
>=1,572,864
GROWN GAS-ACCUMULATION SIZE (BCFG)

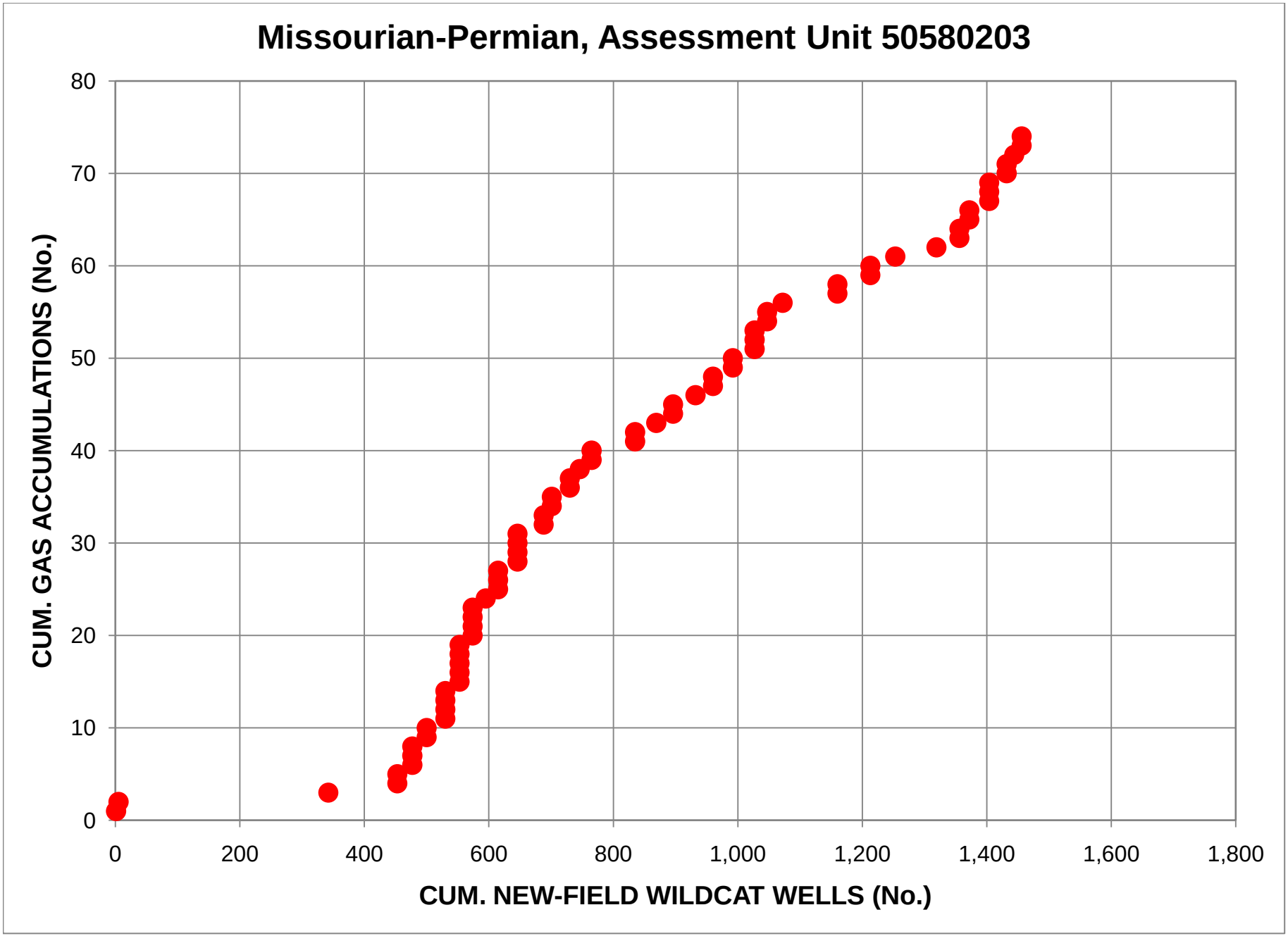

Missourian-Permian, Assessment Unit 50580203
GROWN GAS-ACCUMULATION SIZE (BCFG)
100,000
10,000
1,000
100
10
1
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
ACCUMULATION-DISCOVERY YEAR

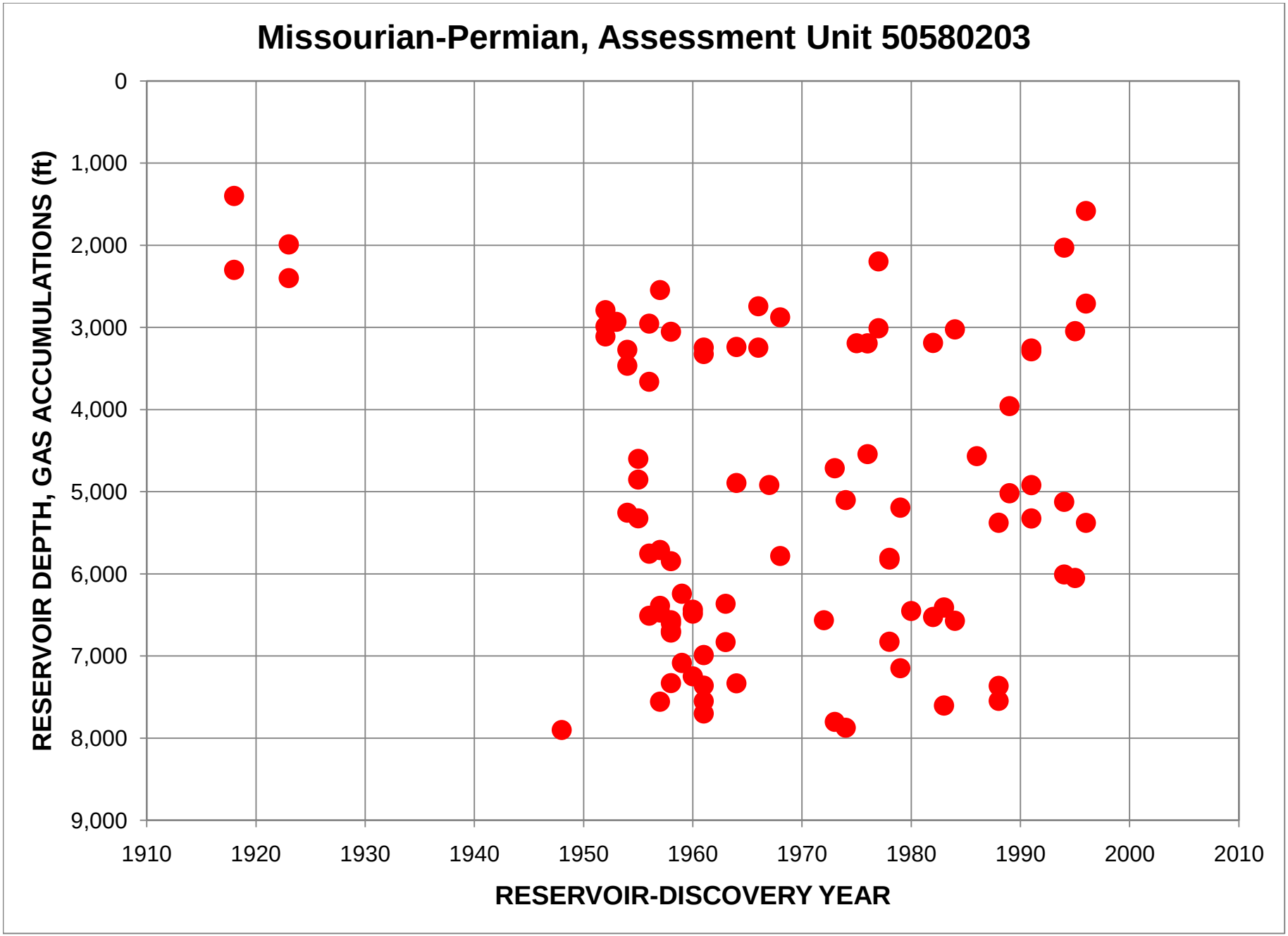

Missourian-Permian, Assessment Unit 50580203
GROWN GAS-ACCUMULATION SIZE (BCFG)
100,000
10,000
1,000
100
10
1
0
200
400
600
800
1,000
1,200
1,400
1,600
1,800
CUM. NEW-FIELD WILDCAT WELLS (No.)

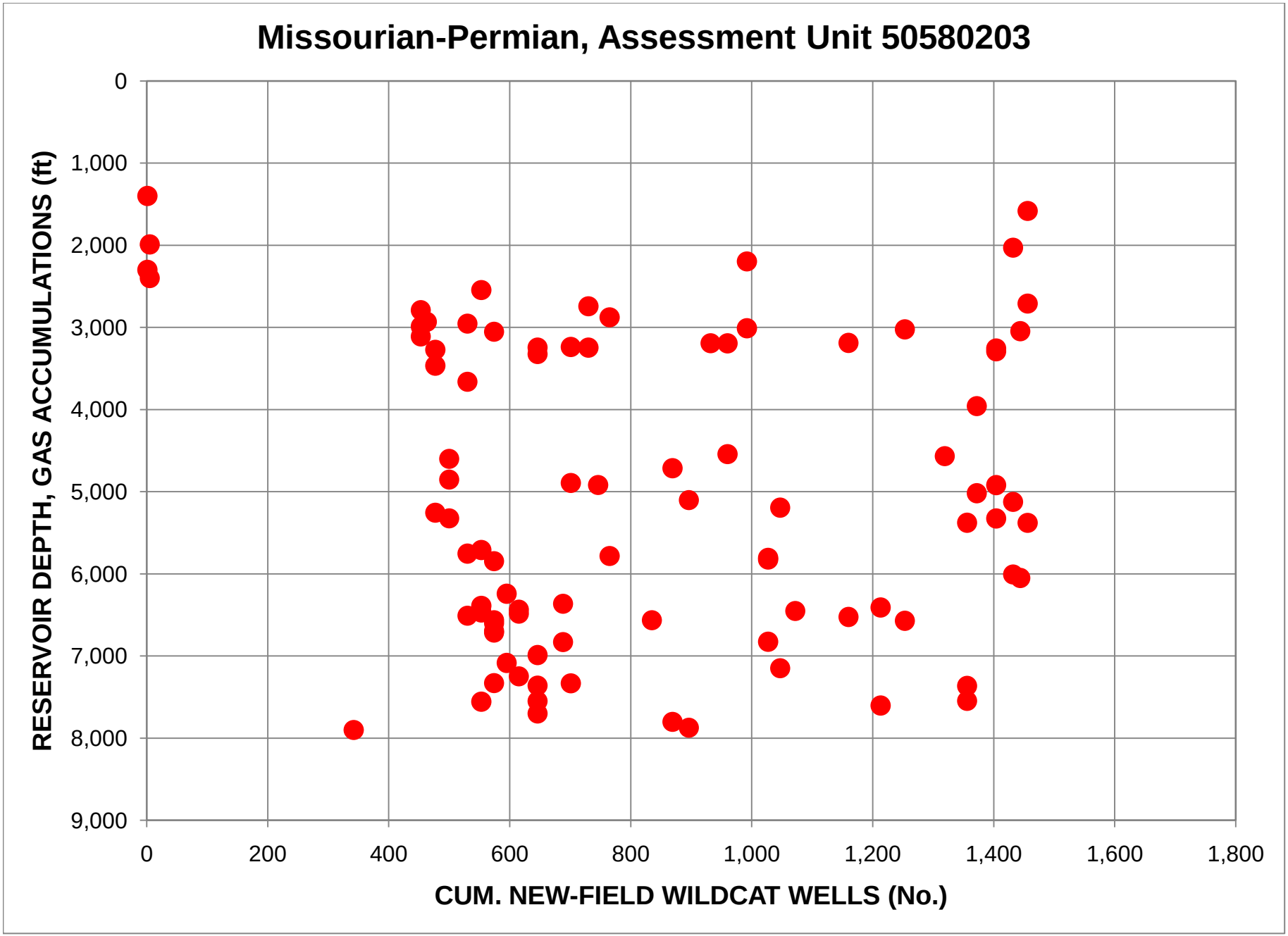

Missourian-Permian, Assessment Unit 50580203
CUM. GROWN GAS VOLUME (BCFG)
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
ACCUMULATION-DISCOVERY YEAR

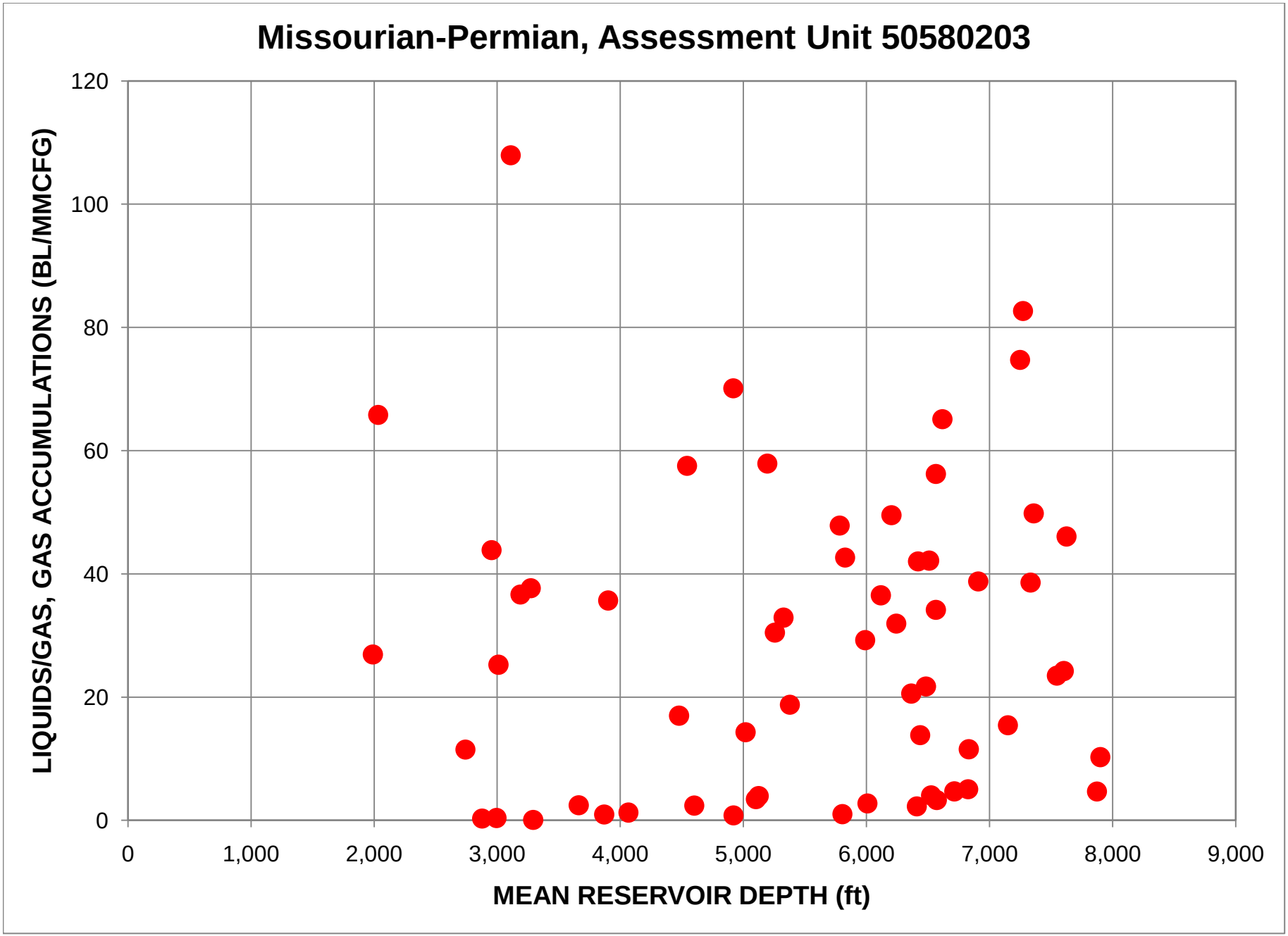

Missourian-Permian, Assessment Unit 50580203
CUM. GROWN GAS VOLUME (BCFG)
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
0
200
400
600
800
1,000
1,200
1,400
1,600
1,800
CUM. NEW-FIELD WILDCAT WELLS (No.)


Missourian-Permian, Assessment Unit 50580203
CUM. GAS ACCUMULATIONS (No.)
0
10
20
30
40
50
60
70
80
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
ACCUMULATION-DISCOVERY YEAR


Missourian-Permian, Assessment Unit 50580203
CUM. GAS ACCUMULATIONS (No.)
0
10
20
30
40
50
60
70
80
0
200
400
600
800
1,000
1,200
1,400
1,600
1,800
CUM. NEW-FIELD WILDCAT WELLS (No.)


Missourian-Permian, Assessment Unit 50580203
RESERVOIR DEPTH, GAS ACCUMULATIONS (ft)
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
RESERVOIR-DISCOVERY YEAR


Missourian-Permian, Assessment Unit 50580203
RESERVOIR DEPTH, GAS ACCUMULATIONS (ft)
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
0
200
400
600
800
1,000
1,200
1,400
1,600
1,800
CUM. NEW-FIELD WILDCAT WELLS (No.)


Missourian-Permian, Assessment Unit 50580203
LIQUIDS/GAS, GAS ACCUMULATIONS (BL/MMCFG)
120
100
80
60
40
20
0
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
MEAN RESERVOIR DEPTH (ft)