

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

APPLICATION OF MEWBOURNE OIL COMPANY  
FOR A NON-STANDARD OIL SPACING AND  
PRORATION UNIT AND COMPULSORY POOLING,  
EDDY COUNTY, NEW MEXICO.

Case No. 20671

VERIFIED STATEMENT OF CHARLES CROSBY

COUNTY OF MIDLAND            )  
  ) ss.  
STATE OF TEXAS                )

Charles Crosby, being duly sworn upon his oath, deposes and states:

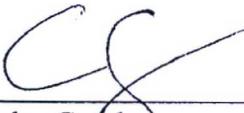
1. I am over the age of 18, and have personal knowledge of the matters stated herein.
2. I am a geologist for Mewbourne Oil Company ("Mewbourne"), and I am familiar with the geological matters involved in this case. I have been qualified by the Division as an expert petroleum geologist.
3. The following geological plats are attached hereto:
  - (a) Attachment A is a structure map of the Top of the Wolfcamp formation. It shows that structure dips gently to the East-Southeast. It also shows a line of cross-section.
  - (b) Attachment B is a gross sand isopach of the Lower 3<sup>rd</sup> Bone Spring Sand, the test zone for the Bourbon Red 11-12 B3DA State Com 1H. It shows that the sand across the well unit has a uniform thickness of approximately 150-190 feet.
  - (c) Attachment C is a west-east cross section. The well logs on the cross-section give a representative sample of the 3<sup>rd</sup> Bone Spring Sand formation in this area. The target zone for the well is the Lower 3<sup>rd</sup> Bone Spring Sand, and that zone is continuous across the well unit.
4. I conclude from the maps that:
  - (a) The horizontal spacing unit is justified from a geologic standpoint.
  - (b) Each quarter-quarter section in the unit will contribute more or less equally to production.

EXHIBIT 2

(c) There is no faulting or other geologic impediment on the area which will affect the drilling of the subject well.

5. Attachment D contains information from other 3<sup>rd</sup> Bone Spring Sand wells drilled in this area. Production for wells with similar completions and similar time online seems to show a preference for laydown orientation, and the completed wells in the area (recent completions) are apparently commercial.

6. Attachment E is the Survey Calculation Report. The producing interval of the proposed well will be orthodox.

  
\_\_\_\_\_  
Charles Crosby

VERIFICATION

STATE OF TEXAS                    )  
  ) ss.  
COUNTY OF MIDLAND            )

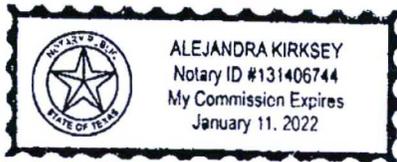
Charles Crosby, being duly sworn upon his oath, deposes and states that: He is a geologist for Mewbourne Oil Company; he is authorized to make this verification on its behalf; he has read the foregoing statement, and knows the contents thereof; and the same is true and correct to the best of his knowledge, information, and belief.

  
\_\_\_\_\_  
Charles Crosby

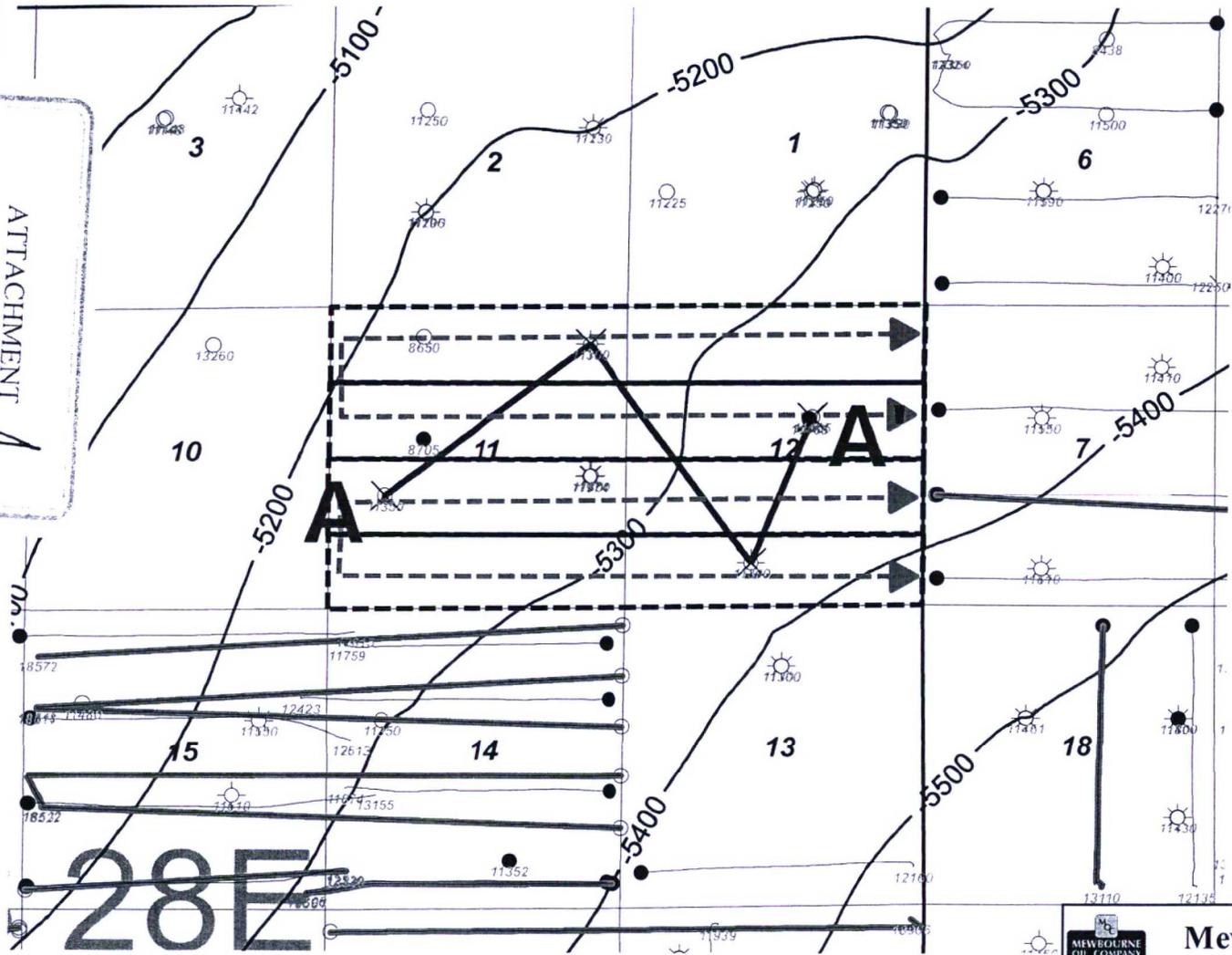
SUBSCRIBED AND SWORN TO before me this 5<sup>th</sup> day of August, 2019 by Charles Crosby.

My Commission Expires: January 11, 2022

  
\_\_\_\_\_  
Notary Public



ATTACHMENT  
A



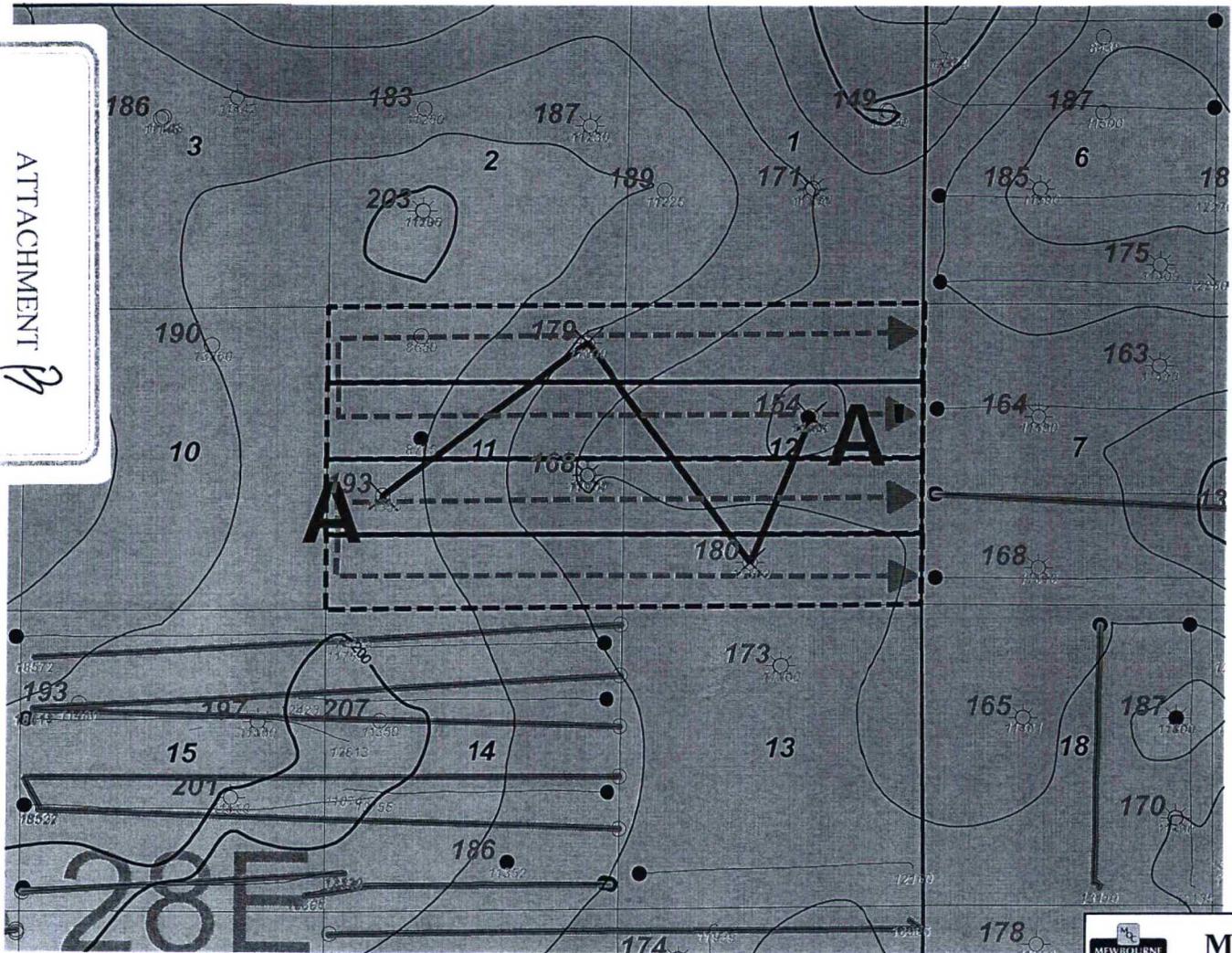
Horizontal Activity Color Code

— 3<sup>rd</sup> Bone Spring Sand



<p align="center"><b>Bourbon Red 11-12 Wells</b>  <b>Horizontal Activity Map</b>  <b>Top Wolfcamp Structure (C.I. 100')</b>          Wells TD 8000' filtered out</p>		
8/5/17	Eddy County	New Mexico
		Geol: C. Crosby

ATTACHMENT B



Horizontal Activity Color Code

3rd Bone Spring Sand

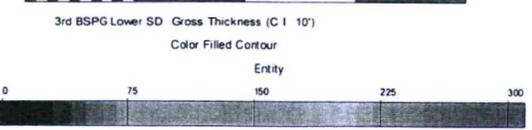


Lower 3rd BSPG SD Thickness

TD

1:35000

1750 0 1750 3500 5250 us ft



 <b>Mewbourne Oil Company</b>		
Bourbon Red 11-12 Wells Horizontal Activity Map 3rd BSPG Lower SD Thickness Isopach (C.I. 10') Wells TD - 8000' filtered out		
8/5/17	Eddy County	New Mexico
		Geol. C. Crosby

A  
W

3001517970000  
DEPCO INCORPORATED  
DRY STATE # 1  
Datum: 3425 00  
1907 FUL/1880 FUL  
TWP 18 S - Range 16 E - Sec 10

4421 #

30015339640000  
CIG OPERATING LLC  
STATE #1 CDM 2  
Datum: 3425 00  
C NE NE  
TWP 18 S - Range 16 E - Sec 10

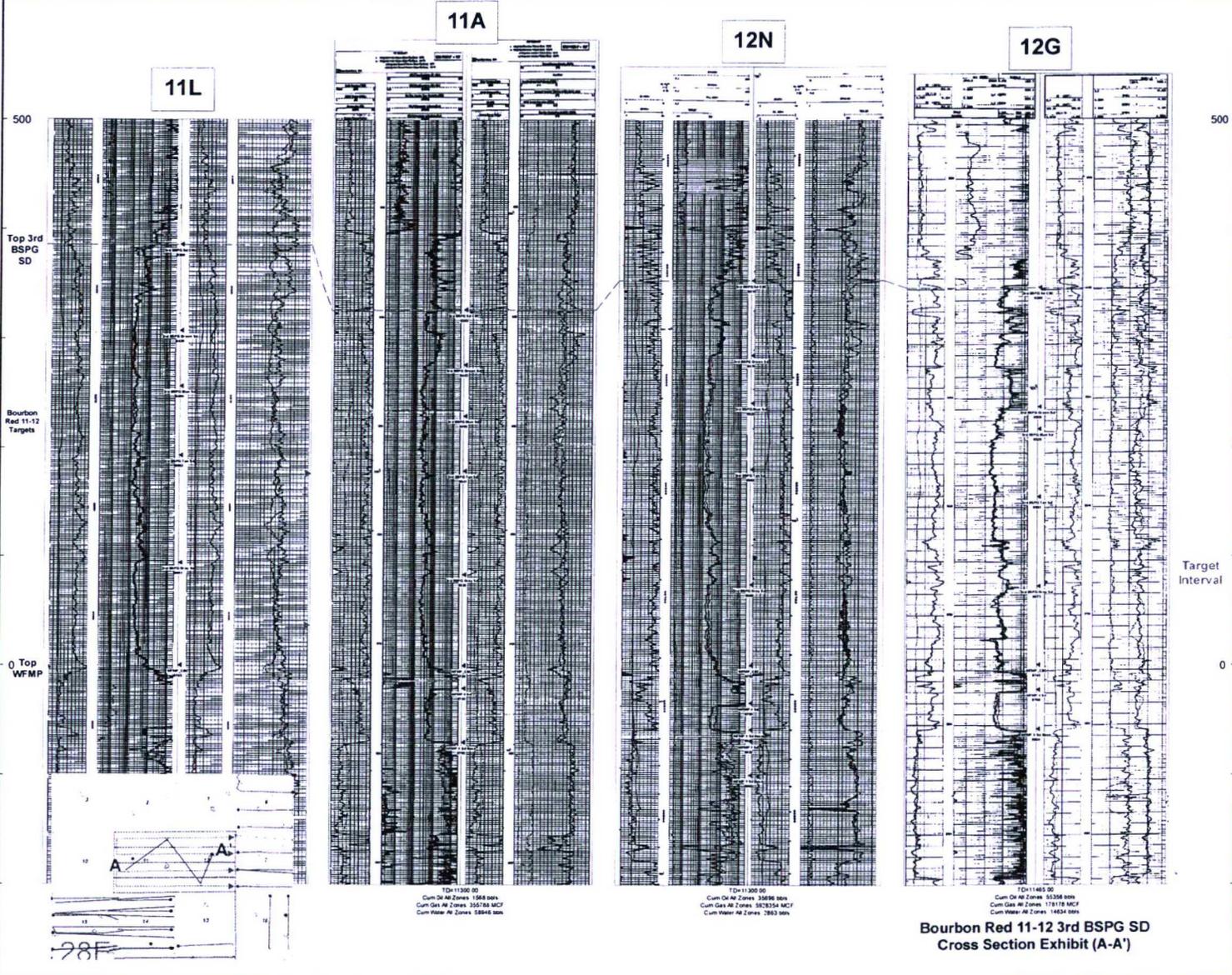
4773 #

30015337060000  
EGG RESOURCES INCORPORATED  
EAST MILLMAN 1: STATE CDM 1  
Datum: 3425 00  
762 FUL/1880 FUL  
TWP 18 S - Range 16 E - Sec 10

2158 #

30015243850000  
SUN EXPLORATION & PRODUCTION COMPANY  
NEW MEXICO STATE CDM 1  
Datum: 3397 00  
1907 FUL/1880 FUL  
TWP 18 S - Range 16 E - Sec 10

A'  
E



ATTACHMENT C

**Bourbon Red Area 3rd BSPG SD Production/Activity Table**

Well Name	Operator	API	Location	Completion Date	Cum Oil (Mbo)	Cum Gas (Bcf)	Cum Water (Mbw)	NS/EW	Production Zone
Phantom 18 State 2H	COG	30015382580000	18O-19S-29E	6/21/2011	64.3	0.25	119.1	NS	3rd BSPG SD
Palmillo 14-15 State 301H	Apache	30015440400000	15P-19S-28E	9/8/2017	183.9	0.63	368.8	EW	3rd BSPG SD
Turkey Track 8-7 State 33H	OXY	30015441590000	9L-19S-29E		Pending			EW	3rd BSPG SD
Palmillo 14-15 State 32H	Apache	30015453410000	15L-19S-28E		Pending			EW	3rd BSPG SD
Palmillo 14-15 State 304H	Apache	30015453420000	15E-19S-28E		Pending			EW	3rd BSPG SD
Palmillo 14-15 State Com 305H	Apache	30015453430000	15E-19S-28E		Pending			EW	3rd BSPG SD
Palmillo 14-15 State 303H	Apache	30015453800000	15L-19S-28E		Pending			EW	3rd BSPG SD
Palmillo 14-15 State 307H	Apache	30015453810000	14M-19S-28E		Pending			EW	3rd BSPG SD
Palmillo 14-15 State 306H	Apache	30015453820000	15D-19S-28E		Pending			EW	3rd BSPG SD
Parkchester 24-23 B3AD State Com 2H	Mewbourne	30015460620000	24A-19S-28E		Pending			EW	3rd BSPG SD

ATTACHMENT  
D