

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

**IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION DIVISION FOR  
THE PURPOSE OF CONSIDERING:**

**APPLICATION OF YATES PETROLEUM  
CORPORATION FOR APPROVAL OF A  
NON-STANDARD OIL SPACING AND  
PRORATION UNIT AND COMPULSORY  
POOLING, EDDY COUNTY, NEW MEXICO.**

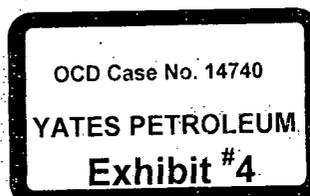
**Case No. 14740**

**AFFIDAVIT OF JOHN HUMPHREY**

COUNTY OF EDDY            )  
  ) ss.  
STATE OF NEW MEXICO    )

John Humphrey, 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 the petroleum geologist for applicant Yates Petroleum Corporation ("Yates") who is responsible for the Grateful BOD Fed Com #1H horizontal well.
3. Attached hereto as Exhibit A is a structure map on top of the Bone Spring formation that is the target of Yates' Grateful BOD Fed Com #1H well.
4. Attached hereto as Exhibit B is a map showing oil productive wells from the 2nd Bone Springs (from both vertical and horizontal wells). The map shows the range of cumulative oil production from the Bone Springs as of May 2011 (the last available public data).
5. Attached hereto as Exhibit C is a type log for the 2nd Bone Springs for the area around the Grateful BOD Fed Com #1H horizontal well. This type log is from the Sand Tank

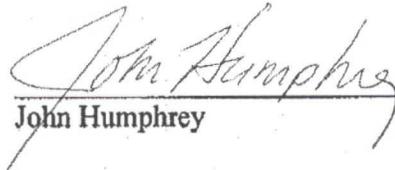


APS Fed Com 2H well directly north of the Grateful BOD Fed Com #1H in Section 12, T18N, R29E (S2 S2).

6. Attached hereto as Exhibit D is the actual horizontal well bore schematic for the Grateful BOD Fed Com #1H well. The horizontal well bore will test a greater reservoir length, thereby increasing the chances for an economic completion. The well has been drilled but is not yet completed.

7. In my opinion, all four quarter-quarter sections in the proposed project area are prospective in the Bone Spring formation. Therefore, Yates anticipates producing reserves from each of the quarter-quarter sections.

8. In my opinion, the pooling of the uncommitted working interests in the proposed project area will avoid the drilling of unnecessary wells and efficiently produce reserves, thereby preventing waste, will protect correlative rights, and will afford each interest owner in the proposed project area the opportunity to recover or receive without unnecessary expense, his, her or its just and fair share of hydrocarbons.

  
John Humphrey

SUBSCRIBED AND SWORN TO before me this 12<sup>th</sup> day of October, 2011 by John Humphrey.

  
Notary Public

My Commission Expires:

4/12/2014



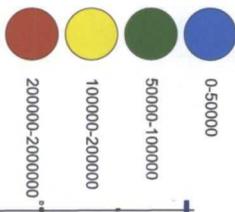
OFFICIAL SEAL  
Lorina E. Flores  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 4/12/2014

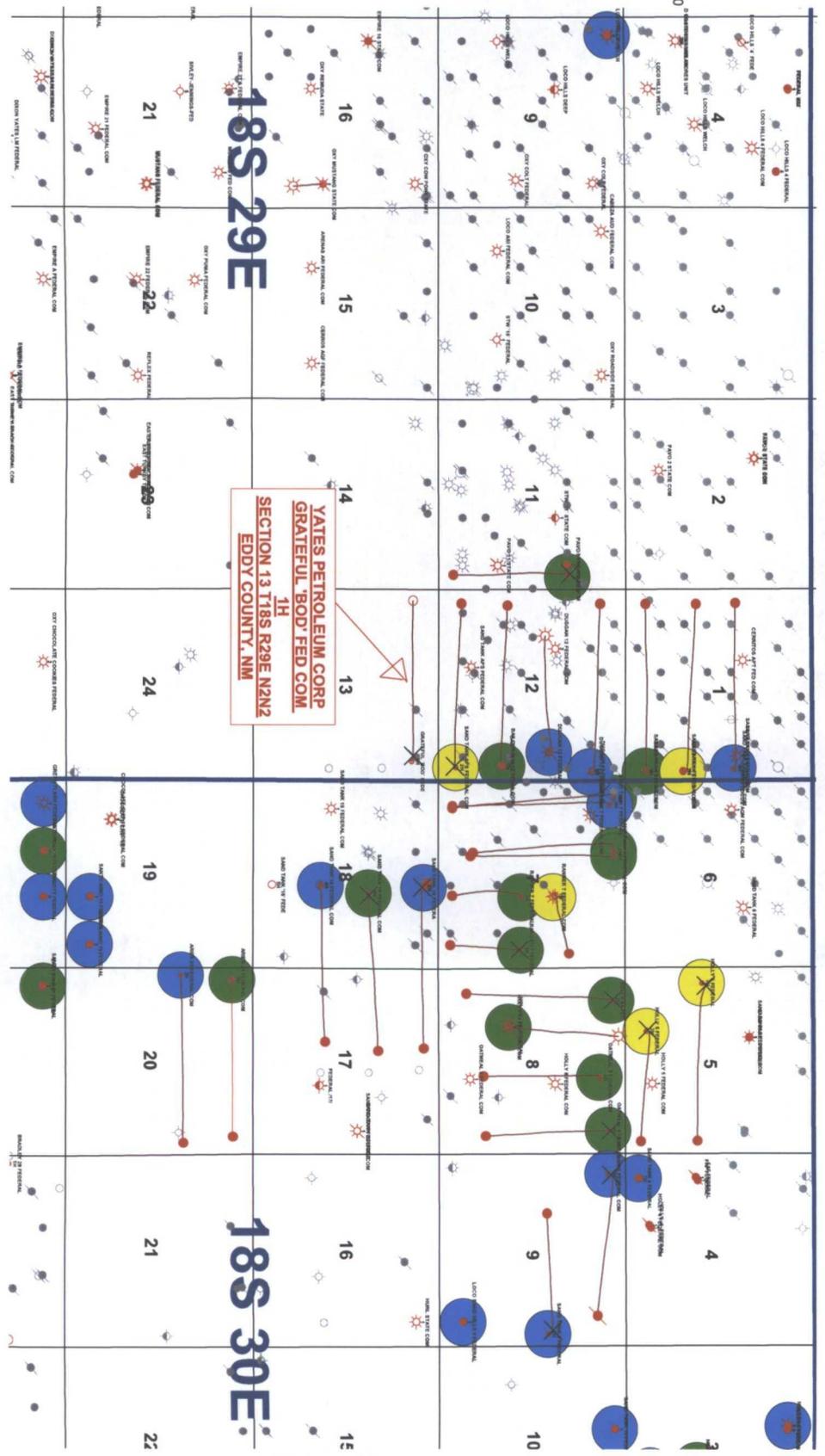


Straight hole well

Cum Oil Volume SSPG, Production



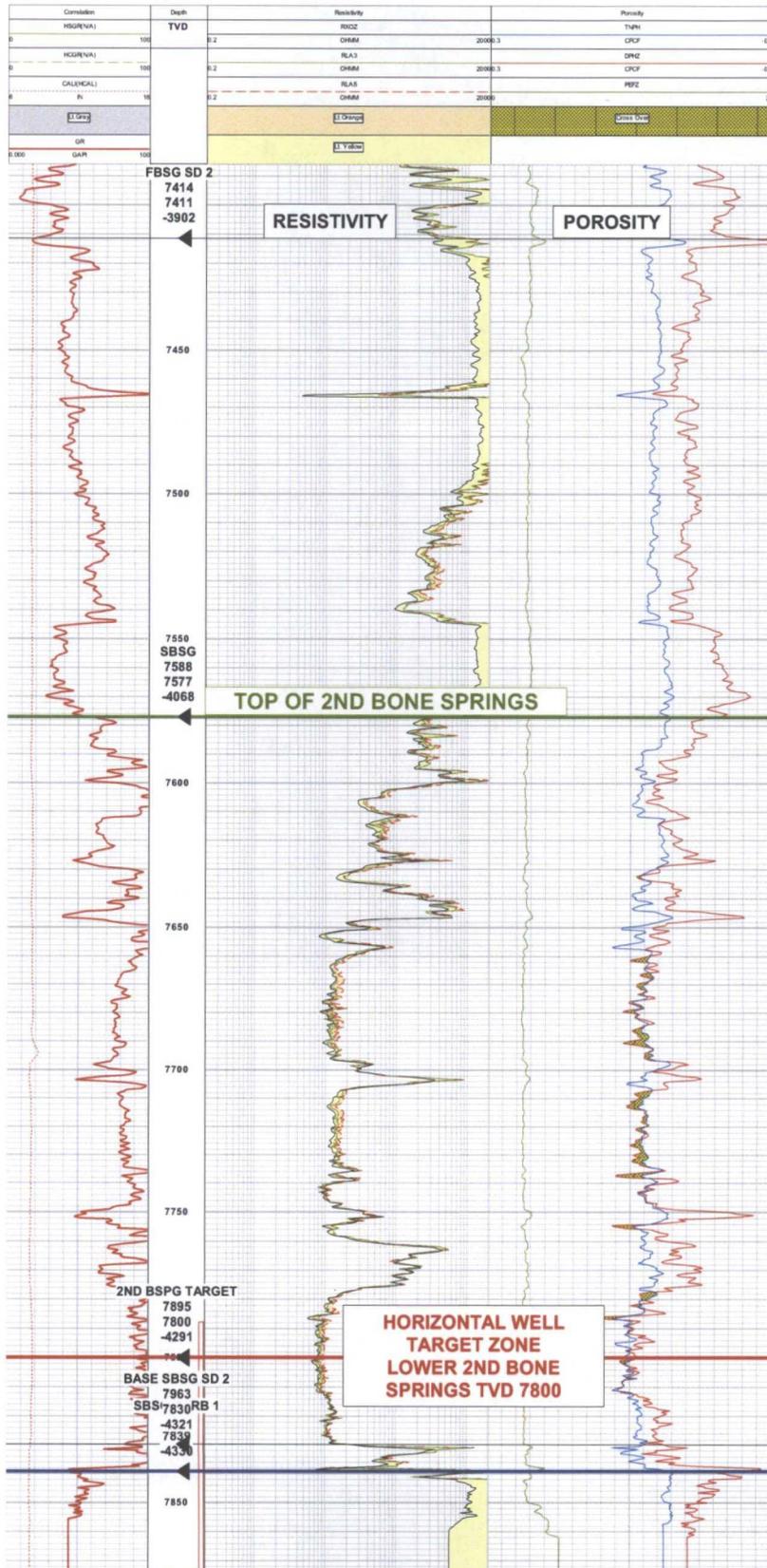
**EXHIBIT B GRATEFUL BOB FED COM 1H SECTION 13 T18S R29E N2N2 EDDY COUNTY NEW MEXICO - CUMULATIVE OIL PRODUCTION BONE SPRINGS HORIZONTAL AND VERTICAL (WELLS) - SCALE AT LEFT. WELLS DEEPER THAN 6000 FEET IN RED**



3001537167000

YATES PETROLEUM CORPORATION  
SAND TANK APS FEDERAL COM 2H  
SE SE  
TWP: 18 S - Range: 29 E - Sec. 12  
Cum Oil All Zones: 106822 bbls  
Cum Gas All Zones: 248952 MCF  
Cum Water All Zones: 12538 bbls  
Datum=3509  
TD=12203

EXHIBIT C TYPE LOG  
GRATEFUL 'BOD' FED COM 1  
SECTION 13 T18S R29E  
EDDY CO, NM  
2ND BONE SPRINGS INTERVAL

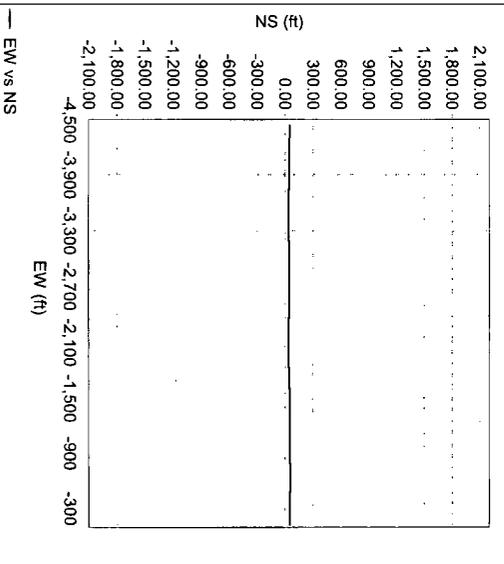
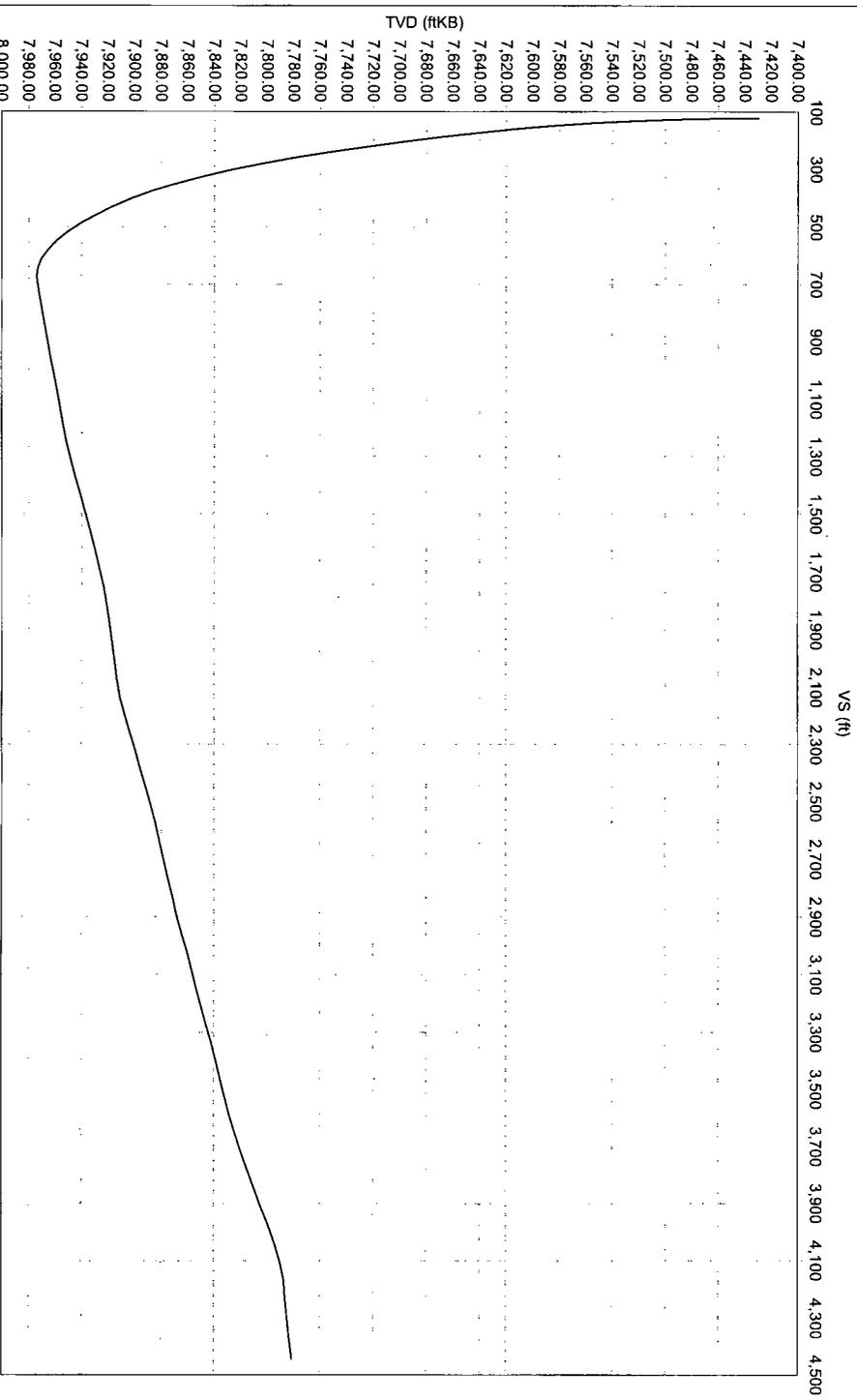


*CTB-622*  
*Sand Tank Bone Springs Pool*  
*96832*



**Directional Survey Plot**  
**GRATEFUL BOD FEDERAL COM #4H**  
**Wellbore - ORIGINAL HOLE**

<b>ORIGINAL HOLE</b>	Wellbore Name	Hole Direction	Deviation Survey	Bottom Hole Legal Location	North-South Distance (ft)	From N or S Line	East-West Distance (ft)	From E or W Line	Vertical Section Direction (°)
	ORIGINAL HOLE	HORIZONTAL	MWD Survey	SEC 13/TWN 18S/RNG 29E/UJNT D	660.0	FNL	330.0	FWL	271.00
	Description	Date		Destination (°)	Inclination Tr In (°)	Azimuth Tr In (°)	NS Tr In (ft)	EW Tr In (ft)	
	MWD Survey	7/5/2011 6:30:00 AM		0.00	0.00	0.00	0.00	0.00	



VS vs TVD

NS vs EW

*Handwritten:* 0087  
 0056.7  
 12300

