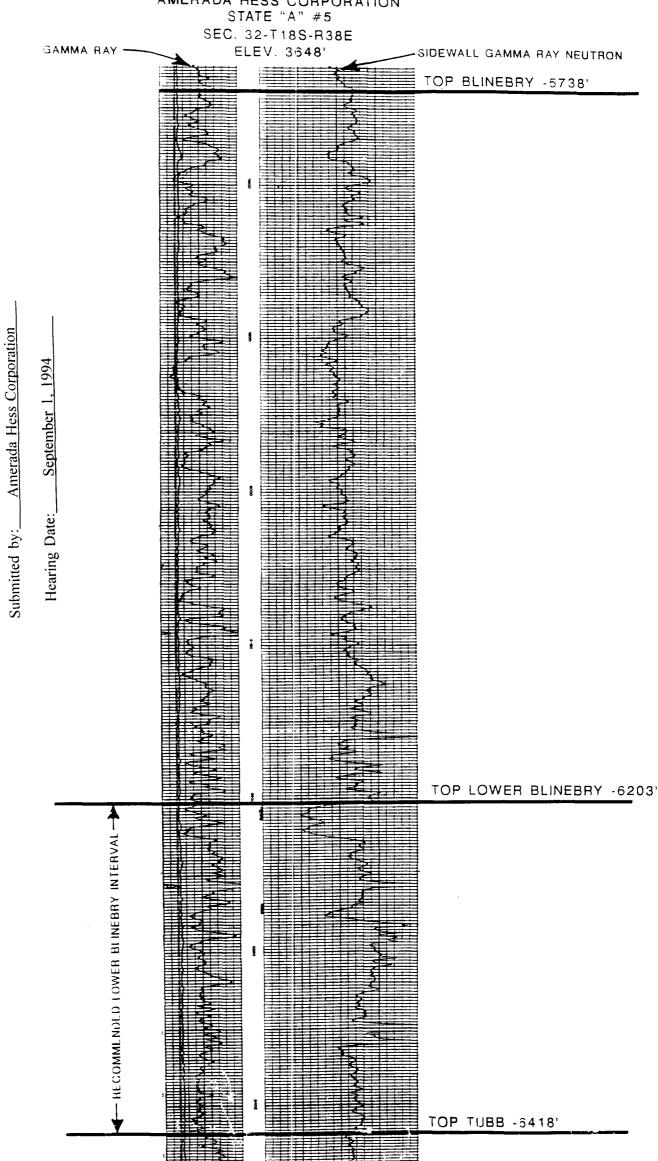
Exhibits 1 through > Complete Set

#### TYPE LOG

AMERADA HESS CORPORATION STATE "A" #5



BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Case No. 10444 Exhibit No. 1

# OIL CONSERVATION DIVISION BEFORE THE

Santa Fe, New Mexico

R 38

unerada | Shell Samedan Samedan Совосо Shall-McKinley A #11 19-185-38E 4/70-Pert 8375'-6377' Acidized W/500 gols. Swabbed 15 BW/hr for 360 BWFD rai= 360 BWPD rate Squeezed W/80 sks cmt. State Cont'l. |---36 |Cont'l. | Amerada State Chevron State Exxon State State Hott Lizzie Rice Chevron Amerada Graham State Exxon Texaco Shell Cities Service AHC-State A #3 32-165-38E 2/85-Parf 6204-6275' F 35 90, 0 9M, 1125 MCFPD on 16/64' choke. FTP 960# SI BHP @ -2600' 5.5.= 2435 psi. Sun Amerada Marathon Amerada Hardin Amoco Mobil 31 State State Skelly Cochran Marathon Berry Shell McKinley 19 6 Bradley-State \* 1 McKinley Cities Service 9 Chevron Getty Texaco Hardin Ашосо + Bowers Exxon • ARCo McKindey
Exxon Amerada Bowers State Std of Tex. Chevron Chevron Orcult State Ашосо Shell Texaco State Texaco Amoco Gulf Marathon B Continental McKinley 28 - 8 Mexico L Terry 20 Exxon 32-Conoco Texaco Texaco Amerede Exxon Crimes Bowers Grime Huston, etal ARCo Exxon 9td of Texas State 8 State Sun Shell Sweet Sweet Texaco U.S. Texaco Amoco | Amoco Surface Divid Shall-Stela A J7 32-185-38E 6/59 D51: 6185-6226 Raulist open 2 for 20 min. G15 in 15 min. at 326 MCPD. Recovered 120 month of 236 MCPD. 150 7244, FF 237J-362J S16 7244, FF 237J-362J S16 7244 Shell Grimes Chevron Conoco Crimes ARCo 12 PIDELL Surface Divided
State 16 Yates Pet,etal •= State Ашосо Gulf (est) on 30/64" choke GDR= 71,400 Squeezed perfs W/100 sks cml. Ашосо SHELL-GRIMES #10 28-185-388 10/69 Perf. 6284'-5324' Acidized W/3000 gals. sold f 12 80, 87 BW in 9 hrs. on 1" Miser Oil Houston- | Morris Continental Ашосо Chevron Antweil State Ашосо State State-Turner Апросо Small Tracts C.W. Trainer Surface & Minerals D

C.W. Trainer Exx Terry G. Spears | Small Tracts Byers Amaco Skelly Skelly Moran 15 Marwin Capps ALLOCO Shell 27 0 Amoco Small Turner Small, Tracts Dev Samedan Thorpe Byers Ашосо Tracts Subdin Amoco | Foster Pet Fracts Small Pacts erguson Submitted by: Subdiv. in lots Subdiv. in lots Hearing Date: Charicia Taylor Colonial Homas,Inc Cities Service Ашосо Case No. \_ Cola Pet. 23 -5: 26 10444 Amerada Hess Corporation September 1, 1994 AMERADA HESS CORPORATION SOUTHWEST REGION September 1, 1994 Case No. 10444  $\square$ Exhibit No. SCALE IN MILES LEGEND CAS WELL OIL WELL AHC RULL INTEREST DRY & ABENDONED AREA OF INTEREST AHC FULL INTEPEST, ASSIGNED RETAINING AN INTEREST HOBBS FIELD 10

Texaco

Exxon

Fina

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LEA COUNTY, NEW MEXICO

AT CHEESES

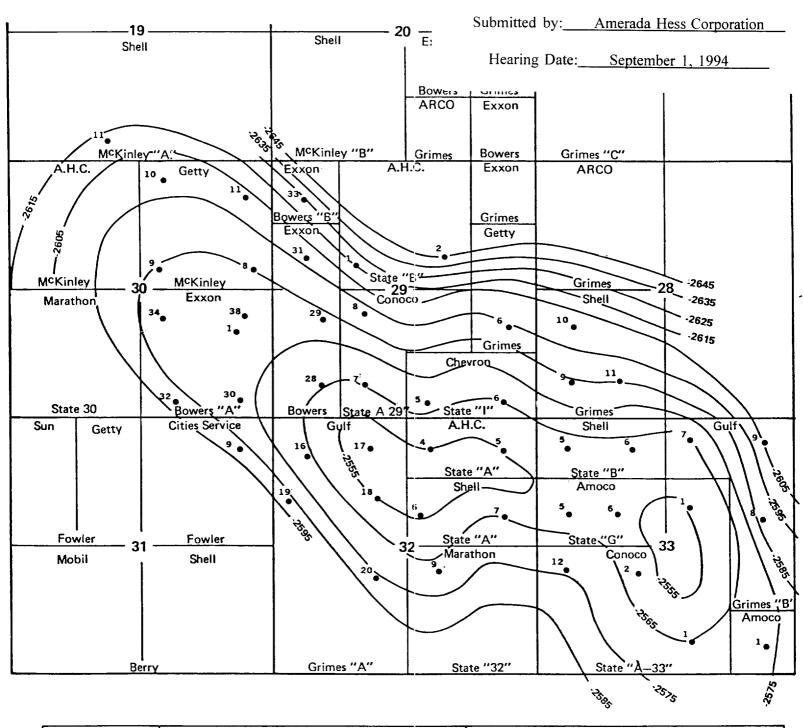
SCALE. AS SHOWN

### BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

R-38-E

Case No. 10444 Exhibit No. 3



Location Map	LEGEND		SOUTH	SOUTHWEST PRODUCTION REGION		
	Oil Gas	C I = 10'	L	HOBBS FIELD Lea County, New Mexico		
	Ory & Abn     ✓ Injection	(DEPTHS ARE SUB SEA)	AMERADA LOWE	LOWER BLINEB	R BLINEBRY	
	Salt Wtr. Disposal		HE55	FORMATION STRU SCALE 1" = 200		
			Date: APRIL, 1985		Pa ge :	
			Originator: E. HAAS			

#### Volumetric Analysis Amerada Hess Corporation State A Lease Hobbs Lower Blinebry

Case	No.	104	144
Septe	mbe	r 1	, 1994

Porosity =	0.13 (fraction)	P* =	2455 psia (Pressure transient
Net pay =	18 feet		analysis, 3-11-85)
Area =	80 acres	T≖	573 degrees Rankine
Ah =	1440 acre-feet	Tc =	392 degrees Rankine
Initial GOR =	32,000 cu. ft. / bbl.	Tr≖	1.46
Sw =	0.25 (fraction)	Pc =	664 psia
Gg =	0.7305 (analysis, 3-1-85)	Pr =	3.69
Initial Gravity	= 49.4 degrees API	Z =	0.746

Based on volumetric analysis of gas condensate reservoirs: Applied Petroleum Reservoir Engineering, Craft and Hawkins, pp. 66.

Initial Gas-in-Place / acre-feet of reservoir rock:

$$Gi = (379.4) (P) (Vb) / ((Z) (RT))$$

- **=** (379.4) (2455) (43560) (0.13) (1-0.25) / ( (0.746) (10.73) (573) )
- = 862.5 MCF / acre feet

Mole Fraction equals volume fraction, therefore,

fg = Ng/(Ng + No)

- = (GOR / 379.4) / ((GOR / 379.4) + 350 (Go / Mo))
- = (32,000/379.4) / ((32,000/379.4 + 350 (0.7822) / 139.9))
- = 0.9773

#### Initial Gas-in-Place:

OGIP = (fg)(Gi)

- = (0.9733) (862.5 MCF / acre feet)
- = 842.9 MCF / acre feet
- = (842.9 MCF / acre feet) (1440 acre feet)

OGIP = 1.21 BCF

#### Initial Oll-in-Place:

OOIP = OGIP / GOR

- = (842,900 SCF / acre-feet) / (32,000 cu. ft. / bbl.)
- = 26.34 STB / acre feet
- = (26.34 bbls. / acre feet) (1440 acre feet)

OOIP = 37,900 STB

#### Recovery of oil and gas based on an 85% recovery factor

Np = 32,200 STB

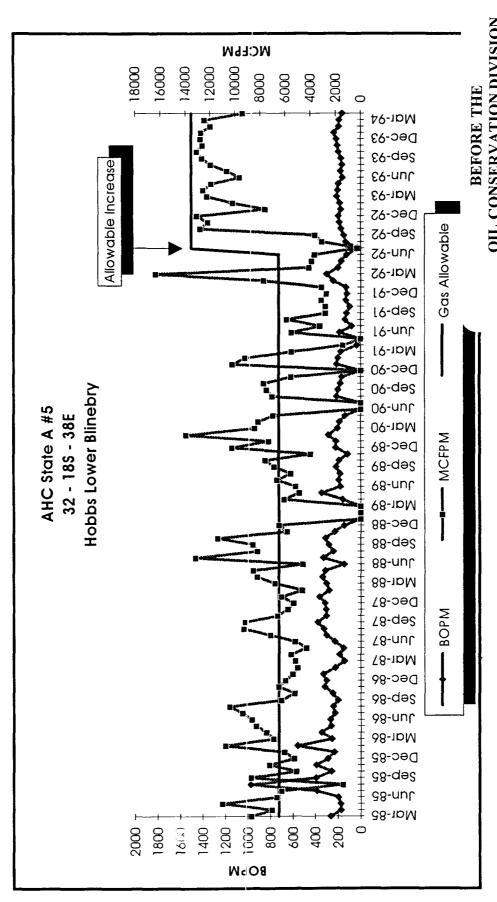
Santa Fe, New Mexico

1.03 BCF

Case No. <u>10444</u> Exhibit No. <u>4</u>
--------------------------------------------

Submitted by: Amerada Hess Corporation

Hearing Date: September 1, 1994



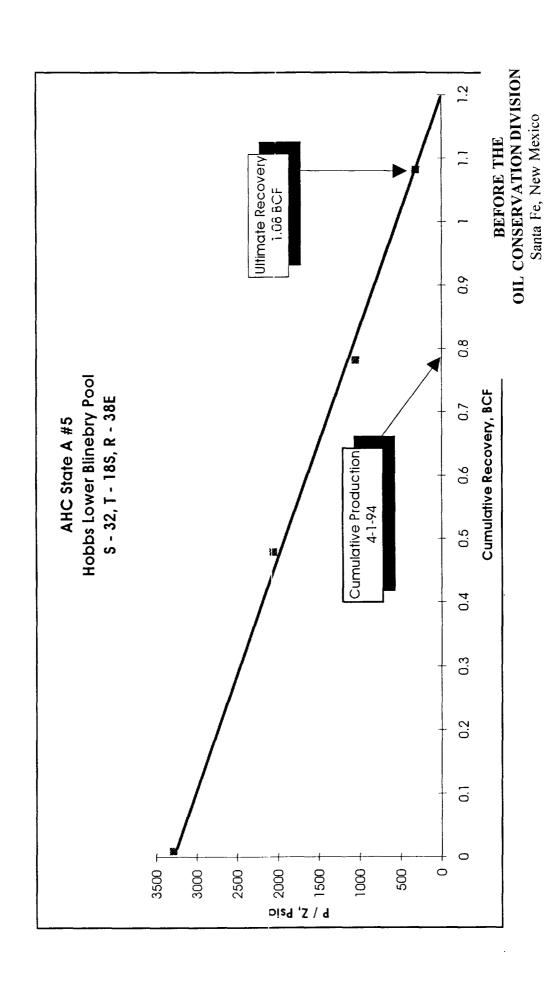
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case No. 10444 Exhibit No. 5

Submitted by: Amerada Hess Corporation

September 1, 1994

Hearing Date:\_



Submitted by: Amerada Hess Corporation

September 1, 1994

Hearing Date:\_\_\_

Case No. 10444 Exhibit No. 6

Case No. 10444 September 1, 1994

Amerada Hess Corporation respectfully requests consideration of the attached Exhibits 1 - 4 for permanent adoption of new pool rules for the Hobbs Lower Blinebry Pool. On February 20, 1992, Amerada Hess Corporation gave testimony resulting in the establishment of temporary pool rules which separated the Hobbs Upper and Lower Blinebry Pools and provided for development of the Lower Blinebry Pool on 80 acre well spacing. The resulting allowable for the Lower Blinebry Pool was 222 BOPD and 444 MCFD, due to the depth bracket allowable and well spacing. The NMOCD further required that the case be reopened in June, 1994 to allow operators to appear and show cause why the temporary pool rules should not be rescinded, the pool developed on 40 acre spacing, rejoined with the Upper Blinebry Pool and redesignated the Hobbs Blinebry Pool.

The Hobbs Field is located West of Hobbs, New Mexico, see Exhibit 1. In the February, 1992 testimony, AHC showed that the volumetrically determined recovery for the AHC State A #5 is (1.03 BCF at 85% recovery factor), see Exhibit 2. Furthermore, a pressure versus cumulative plot was presented which indicated that the recovery from the AHC State A #5 would be 1.05 BCF at a 500 psia abandonment pressure. This indicated that one well is capable of efficiently draining 80 acres. Following the establishment of the temporary special pool rules, Amerada Hess Corporation produced the State A #5 at the higher allowable rate, see Exhibit 3. Production from the AHC State A #5 averaged 6 BOPD, 2 BWPD and 335 MCFD at 100 psig TP on a 24/64" choke in April, 1994. On July 14, 1994, AHC obtained a static bottom hole pressure on the State A #5 Lower Blinebry Pool and found the pressure to be 901 psia at 6275'. This allowed further refinement of recovery estimates by pressure versus cumulative plot. Exhibit 4 depicts a pressure versus cumulative plot, indicating a recovery of 1.08 BCF at a 300 psia abandonment pressure. This shows good agreement between both the volumetric analysis and pressure versus cumulative presented in February, 1992.

Based on the agreement between volumetric and pressure versus cumulative recovery estimate techniques, we believe that 80 acre well spacing provides an efficient means of recovery for the Lower Blinebry Pool. Further, requiring development on 40 acre well spacing would raise the economic limit on production and thereby reduce the recovery, resulting in waste.

## BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico