Exhibits 1 through 21

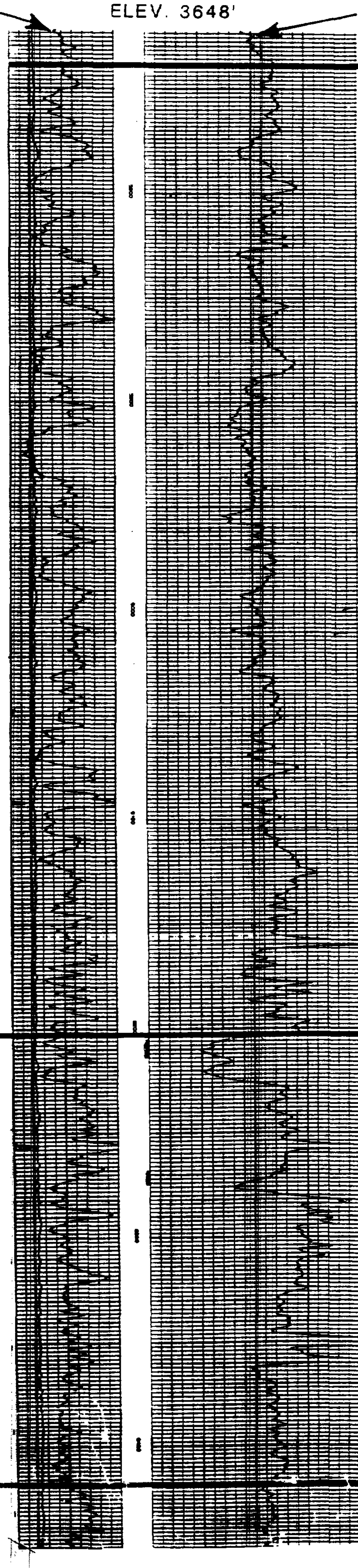
TYPE LOG

AMERADA HESS CORPORATION
STATE "A" #5
SEC. 32-T18S-R38E
ELEV. 3648'

5.69 -2200
2000 psia
Upper

GAMMA RAY

SIDEWALL GAMMA RAY NEUTRON



TOP BLINEBRY -5738'

630 psia
3-28

Perfs
5905-
57

abandoned when lower completed

TOP LOWER BLINEBRY -6203'

Shale bed marker — imperm.

RECOMMENDED LOWER BLINEBRY INTERVAL

6204-
75

3-85
2455 psia
7-14-94
90 psia
3-15-91
1596 psia

TOP TUBB -6418'

BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case No. 10444 Exhibit No. 1

Submitted by: Amerada Hess Corporation

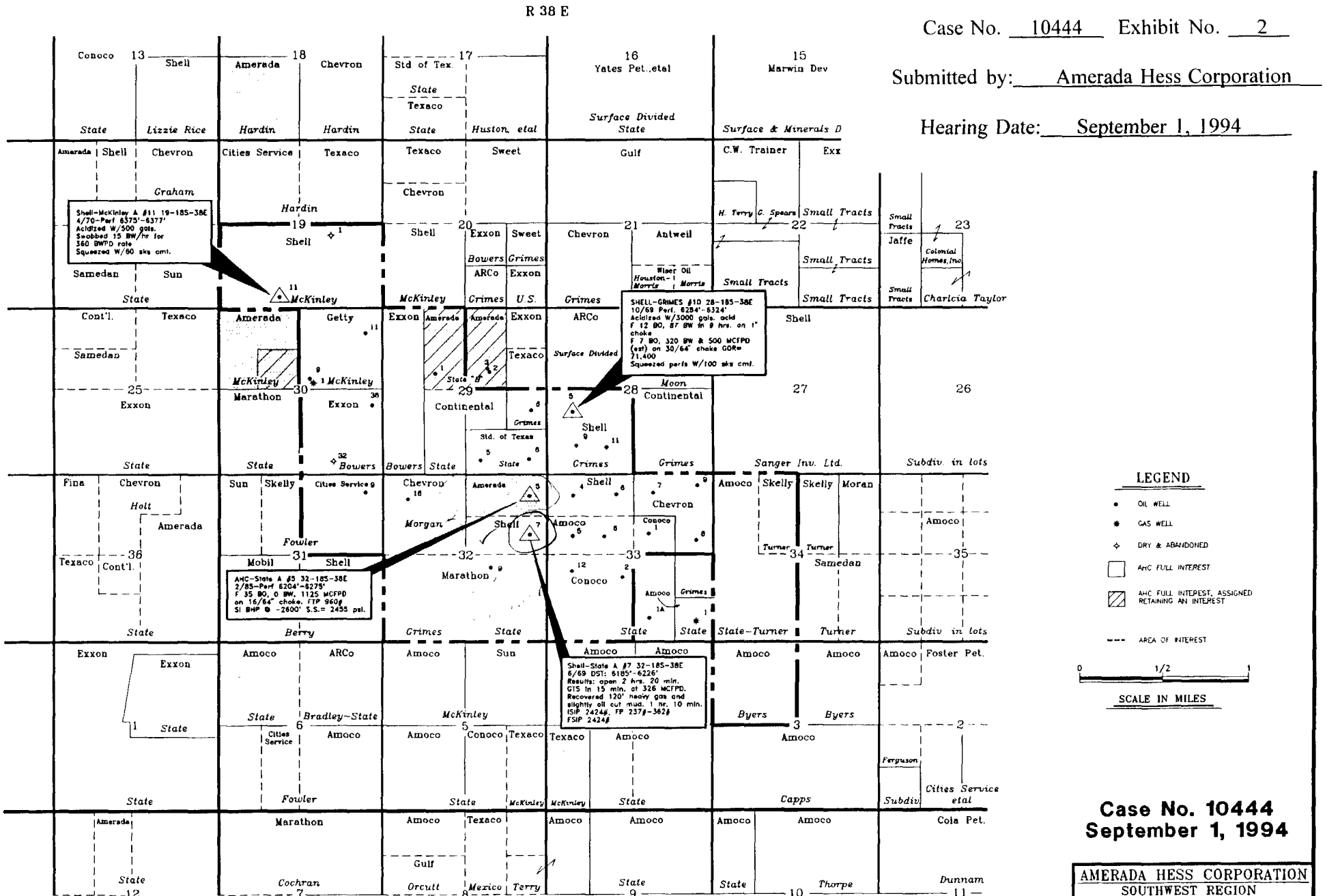
Hearing Date: September 1, 1994

BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case No. 10444 Exhibit No. 2

Submitted by: Amerada Hess Corporation

Hearing Date: September 1, 1994



Case No. 10444
September 1, 1994

AMERADA HESS CORPORATION
SOUTHWEST REGION
HOBBS FIELD
LEA COUNTY, NEW MEXICO

ORIGINATOR:	DRAFTED BY: J.T. CHILDERS	SCALE: AS SHOWN	DATE: 2-7-92

FILE NO: HOBBSFLD

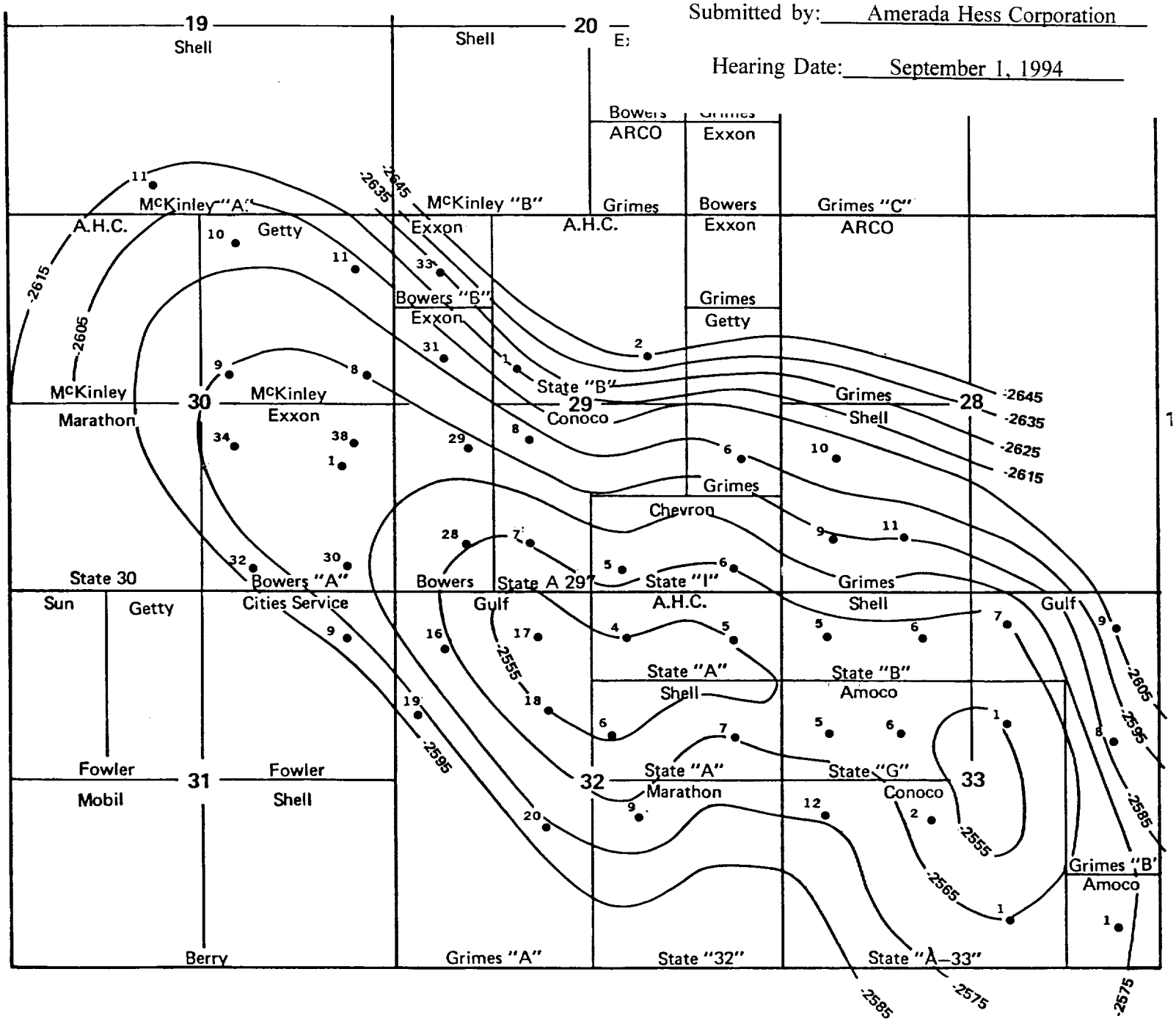
BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

R–38–E

Case No. 10444 Exhibit No. 3

Submitted by: Amerada Hess Corporation

Hearing Date: September 1, 1994



Location Map	LEGEND		SOUTHWEST PRODUCTION REGION HOBBS FIELD Lea County, New Mexico
	Oil Gas Dry & Abn Injection Salt Wtr. Disposal	CI = 10' (DEPTHS ARE SUB SEA)	AMERADA HESS LOWER BLINEBRY FORMATION STRUCTURE SCALE 1" = 2000'
			Date: APRIL, 1985 Page: Originator: E. HAAS

Volumetric Analysis
Case No. 10444 **Amerada Hess Corporation State A Lease**
September 1, 1994 **Hobbs Lower Blinebry**

Porosity =	0.13 (fraction)	P* =	2455 psia (Pressure transient analysis, 3-11-85)
Net pay =	18 feet		
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.

Og = 141.5 / (49.4 + 131.5)
= 0.7822

Mo = 6084 / (49.4 - 5.9)
= 139.9

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 Oil-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

Gp = 1.03 BCF

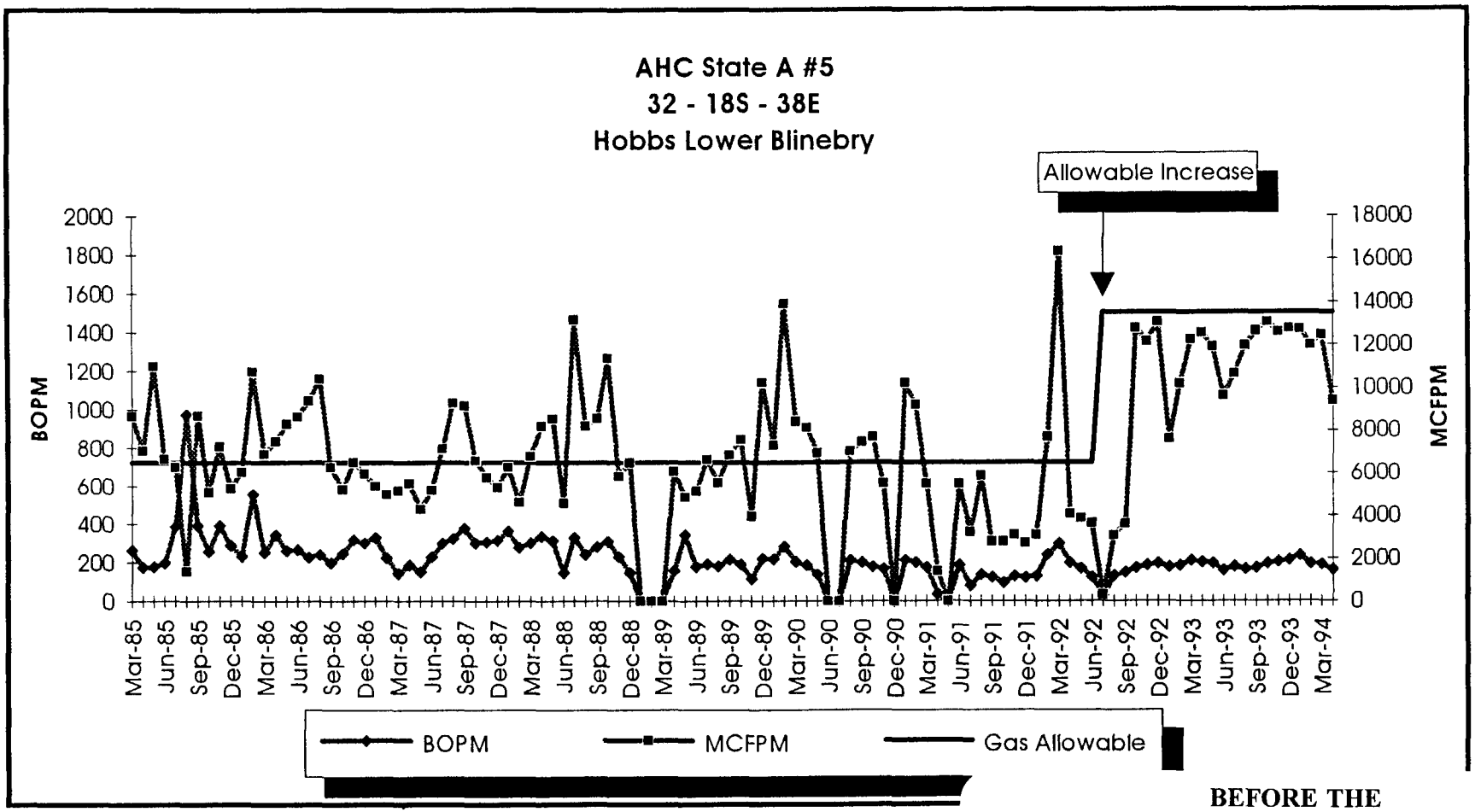
BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case No. 10444 Exhibit No. 4

Submitted by: Amerada Hess Corporation

Hearing Date: September 1, 1994

Case No. 10444
September 1, 1994



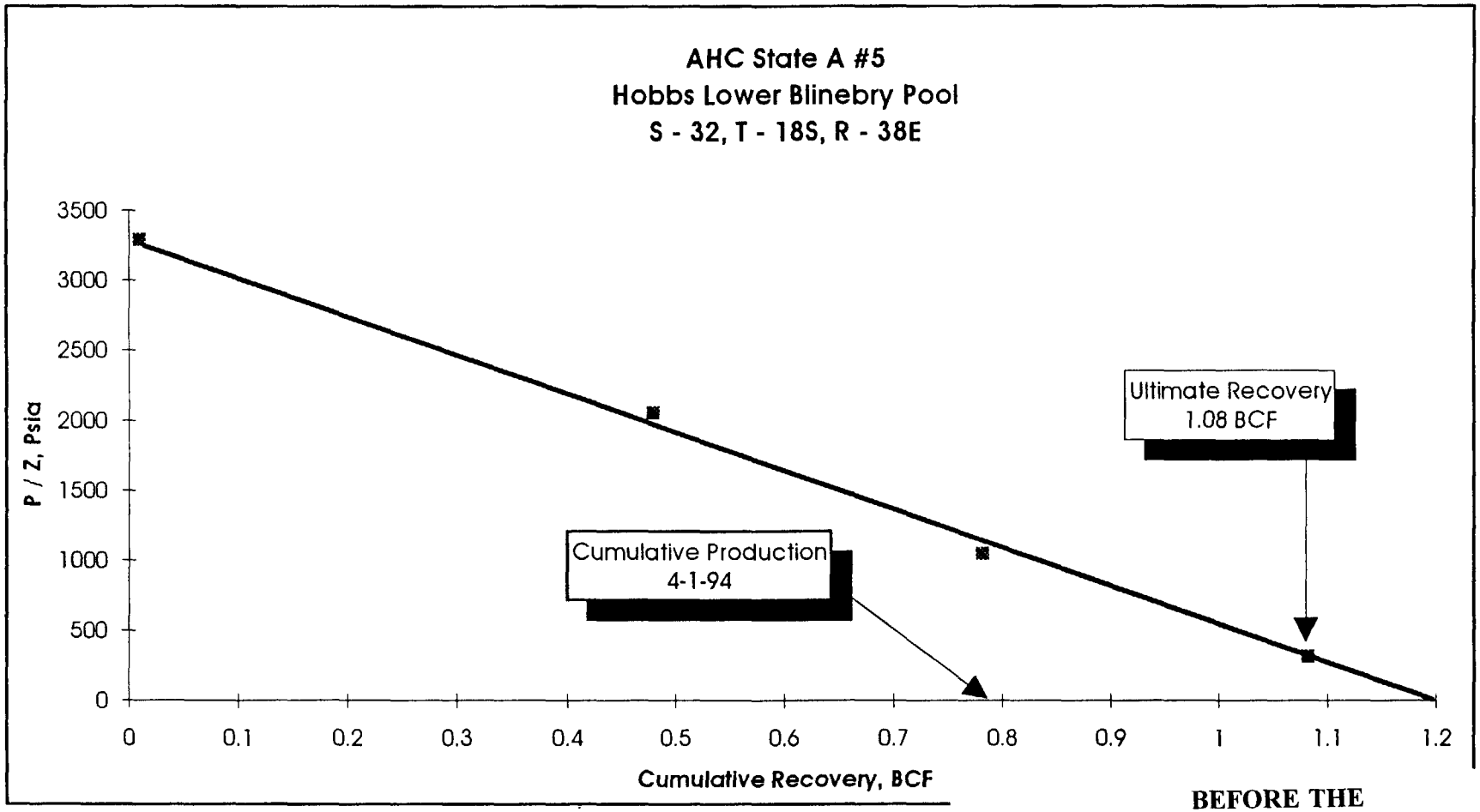
BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case No. 10444 Exhibit No. 5

Submitted by: Amerada Hess Corporation

Hearing Date: September 1, 1994

Case No. 10444
September 1, 1994



BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case No. 10444 Exhibit No. 6

Submitted by: Amerada Hess Corporation

Hearing Date: September 1, 1994

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

Case No. 10444 Exhibit No. 7

Submitted by: Amerada Hess Corporation

Hearing Date: September 1, 1994