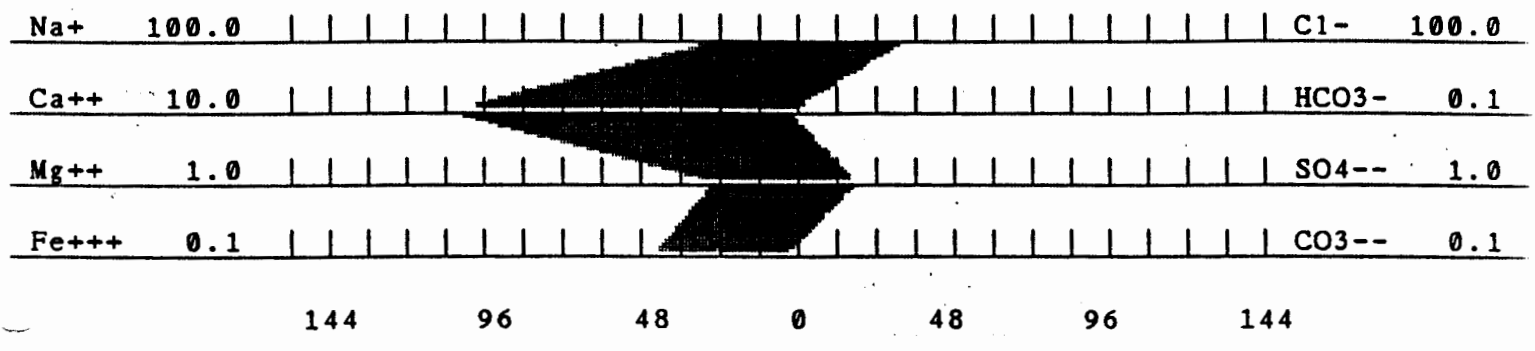
WATER ANALYSIS
for
PHILLIPS PETROLEUM

Date of Analysis:	FEBRUARY 18, 1992	Analysis #:	N/D
Company:	PHILLIPS PETROLEUM	Attention:	N/D
City:	GT. BEND	State:	KANSAS
Lease/Well #:	BATES NEW WELL 5-5	Field:	SUMNER COUNTY
Type of Water:	N/D	Water (bbl/day):	N/D
Temp.,C:	N/D	Sample Source:	BLEEDER
Use:	N/D	Date of Sampling:	FEBRUARY 12, 1992
Representative:	JIM DANIEL	Analysis By:	HARLAN DAVENPORT

WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



DISSOLVED SOLIDS

CATIONS	mg/l	me/l	AS CaCO3
Ca++	20,000.0	1,000.0	50,000.0
Mg++	292.8	24.0	1,200.0
Fe+++	75.0	4.0	201.6
Ba++	0.0	0.0	0.0
Na+	54,559.3	2,372.1	118,607.1
Mn++	0.0	0.0	0.0
ANIONS			
Cl-	120,000.0	3,380.3	169,014.1
SO4--	950.0	19.8	989.6
CO3--	0.0	0.0	0.0
HCO3-	6.1	0.1	5.0
OH-	0.0	0.0	0.0
S--	0.0	0.0	0.0
TOTAL HARDNESS :		1,024.0	51,200.0
TOTAL SOLIDS (quantitative):			0.0
RESIDUAL HYDROCARBONS :			0.0

DISSOLVED GASES

	mg/
Hydrogen Sulfide,H2S:	0.0
Carbon Dioxide,CO2 :	48.0
Oxygen,O2 :	0.0

PHYSICAL PROPERTIES

pH :	5.8
Specific Gravity :	1.1
TDS (calc.) p.p.m. :	195,883.2

SCALE STABILITIES

Temp. C.	Temp. F.	CaCO3	CaSO4	BaSO4
32	90	N/D	1009	1
38	100	N/D	1112	1
43	109	N/D	1260	1
Max entity,(calc):		1430		0

Rw=.032