

~~EXHIBIT 6~~

K-M CHAVEROO SAN ANDRES UNIT

Injection Water

On September 15, 1988 water samples were obtained from Dale Brown, the proposed water source for the K-M Chaveroo San Andres Unit, and the tank battery on the Kerr-McGee State's "F" Lease in the Chaveroo Field. The Ogallala water from Brown (Section 8, TWP7S, Rge 34E) was mixed with State "F" Lease produced formation brine and no precipitates were formed and as such the two appear compatible. Refer to laboratory report No. 49865, conducted by Oilab, Inc. of Oklahoma City and dated September 22, 1988.

On February 2, 1989 water samples were received by Mobile Analytical Laboratories from the State F #2 and State F #3 WSW. This is fresh water obtained from two water supply wells drilled to a depth of 500 feet on the Kerr-McGee State "FU" Lease. These waters are of comparable quality to the Ogallala water produced from the water source of Dale Brown. The water produced from Dale Brown's supply and the water from Kerr-McGee's water supply wells are considered compatible with each other and with produced formation water and are suitable for use in the secondary recovery project.

RJQ:lrg01

| | |
|-------------------|-------------|
| <u>Kerr-McGee</u> | 18 |
| CASE NO. | 9682 + 9683 |

CHAVEROO FIELD

| Source | Sec 1, T8S, R33E | | Sec 8, T7S,R34E |
|--|------------------------------|------------------------------|---|
| | WSW F#2 2-2-89 MG/L | WSW F#3 2-2-89 MG/L | Windmill Dale Brown 9-15-88 MG/L |
| Calcium | 6 | 7 | 112 |
| Magnesium | 2 | 1 | 42 |
| Sodium | 304 | 293 | 134 |
| Potassium | | | 3 |
| Barium | | | Trace |
| Iron | 1.0 | 1.0 | 0.1 |
| Silica | | | 14 |
| Bicarbonate* | 166 | 161 | 165 |
| Carbonate** | 19 | 17 | 0 |
| Hydroxide | | | 0 |
| Sulfate (SO ₄) | 232 | 248 | 350 |
| Chloride | 195 | 173 | 170 |
| Total Dissolved Solids | ===== 924 | ===== 900 | ===== 990 |
| *(As CaCO ₃) | | | 136 |
| ** (As CaCO ₃) | | | 0 |
| Total Hardness (As CaCO ₃) | | | 456 |
| P Alkalinity (As CaCO ₃) | 16 | 14 | |
| M Alkalinity (As CaCO ₃) | 168 | 160 | 136 |
| Specific Gravity (Temp °F) | 1.0001 | | 1.0021 74 |
| Resistivity (Temp °F) | 1.0101 | .9901 | 6.58 77 |
| pH | 8.4 | 8.3 | 7.78 |
| Calcium Hardness | 14 | 18 | |
| Magnesium Hardness | 10 | 6 | |
| Total Hardness | ===== 24 | ===== 24 | |
| Color (Before Filtration) | Colorless | Colorless | Colorless |
| Color (After Filtration) | Colorless | Colorless | Colorless |

RJQ:lrg01

LABORATORY REPORT NO. 49865

SEPTEMBER 22, 1988

KERR-MCGEE CORPORATION

SAMPLED SEPTEMBER 1988 (BY KERR-MCGEE)

ANALYSES OF 3 WATER SAMPLES:

TUCKER RANCH (FRESH WATER)
DALE BROWN (WINDMILL - OGALLALA FORMATION)
STATE "F" LEASE (CHAVEROO FIELD)

OILAB, INC.



PETROLEUM LABORATORY
AND GAS ENGINEERING
FLOW MEASUREMENT SERVICE

SURESH JOSHI

Area Code 405
Telephone 528-8255

401 N.E. 46
Oklahoma City, Oklahoma
73105

1 - ROBERT J. QUANCE, OKLAHOMA CITY

U. S. Onshore Oper.
SEP 23 1988
E & P DIV.

LABORATORY REPORT NO. 49865

WATER ANALYSIS

KERR MCGEE CORPORATION
DALE BROWN
WINDMILL
FORMATION: OGALLALA
200' NORTH OF HOUSE

DATE SAMPLED: 09-15-88
DATE RUN: 09-17-88
ZONE:

SAMPLED BY: KERR MCGEE

COLOR(BEFORE FILTRATION): COLORLESS
COLOR(AFTER FILTRATION): COLORLESS

*****CHEMICAL CHARACTERISTICS*****

| | mg/l |
|---------------|-------|
| CALCIUM | 112 |
| MAGNESIUM | 42 |
| SODIUM | 134 |
| POTASSIUM | 3 |
| BARIUM | TRACE |
| IRON | 0.10 |
| SILICA | 14 |
| BICARBONATE* | 165 |
| CARBONATE** | 0 |
| HYDROXIDE | 0 |
| SULFATE | 350 |
| CHLORIDE | 170 |
| *(AS CaCO3) | 136 |
| ** (AS CaCO3) | 0 |

| | | | |
|-------------------------------|--------|---------------------------|------|
| TOTAL HARDNESS (AS CaCO3) | 456 | RESISTIVITY (AT 77 DEG F) | 6.58 |
| P ALKALINITY (AS CaCO3) | 0 | TOTAL DISSOLVED SOLIDS | 980 |
| M ALKALINITY (AS CaCO3) | 136 | PH VALUE | 7.78 |
| SPECIFIC GRAVITY (@ 74 DEG F) | 1.0021 | | |

LABORATORY REPORT NO. 49865

WATER ANALYSIS

KERR MCGEE CORPORATION
STATE "F" LEASEE
FIELD: CHAVEROO
CHAVERS CO/NEW MEXICO

DATE SAMPLED: 09-15-88
DATE RUN: 09-17-88
ZONE:

SAMPLED BY: KERR MCGEE

COLOR(BEFORE FILTRATION): COLORLESS ODOR OF SULFIDES
COLOR(AFTER FILTRATION): COLORLESS

*****CHEMICAL CHARACTERISTICS*****

| | |
|---------------|--------|
| | mg/l |
| CALCIUM | 28400 |
| MAGNESIUM | 4440 |
| SODIUM | 66500 |
| POTASSIUM | 6675 |
| BARIUM | TRACE |
| IRON | 15 |
| SILICA | 45 |
| BICARBONATE* | 325 |
| CARBONATE** | 0 |
| HYDROXIDE | 0 |
| SULFATE | 350 |
| CHLORIDE | 171580 |
| *(AS CaCO3) | 266 |
| ** (AS CaCO3) | 0 |

| | | | |
|-------------------------------|--------|---------------------------|--------|
| TOTAL HARDNESS (AS CaCO3) | 97800 | RESISTIVITY (AT 77 DEG F) | 0.035 |
| P ALKALINITY (AS CaCO3) | 0 | TOTAL DISSOLVED SOLIDS | 278285 |
| M ALKALINITY (AS CaCO3) | 266 | pH VALUE | 6.01 |
| SPECIFIC GRAVITY (@ 74 DEG F) | 1.1775 | | |

SOLUBLE SULFIDES 17.6
NO PRECIPITATES WERE FORMED WHEN
THIS WATER WAS MIXED WITH FRESH
WATER FROM DALE BROWN WINDMILL
& AS SUCH THE TWO APPEAR TO BE
COMPATIBLE

LABORATORY REPORT NO. 49865

WATER ANALYSIS

KERR MCGEE
TUCKER RANCH
FRESH WATER

DATE SAMPLED 09-15-88
DATE RUN: 09-17-88
ZONE:

SAMPLED BY: KERR MCGEE

COLOR(BEFORE FILTRATION): COLORLESS
COLOR(AFTER FILTRATION): COLORLESS

*****CHEMICAL CHARACTERISTICS*****

| | |
|---------------|-------|
| | mg/l |
| CALCIUM | 138 |
| MAGNESIUM | 38 |
| SODIUM | 20 |
| POTASSIUM | 4 |
| BARIUM | TRACE |
| IRON | 0.08 |
| SILICA | 12 |
| BICARBONATE* | 135 |
| CARBONATE** | 0 |
| HYDROXIDE | 0 |
| SULFATE | 180 |
| CHLORIDE | 130 |
| *(AS CaCO3) | 110 |
| ** (AS CaCO3) | 0 |

| | | | |
|-------------------------------|--------|---------------------------|------|
| TOTAL HARDNESS (AS CaCO3) | 504 | RESISTIVITY (AT 77 DEG F) | 9.52 |
| P ALKALINITY (AS CaCO3) | 0 | TOTAL DISSOLVED SOLIDS | 645 |
| M ALKALINITY (AS CaCO3) | 110 | pH VALUE | 7.90 |
| SPECIFIC GRAVITY (@ 74 DEG F) | 1.0014 | | |

orig: WRF 2/10/89 Pool - Has data
 c/c: FDC
 BQ
 This water compared with Brown
 water with analysis on WS
 FU#18 Is this water
 compatible with San Antonio
 water?
 Reef

 MOBILE ANALYTICAL LABORATORIES
 P.O. BOX 69210
 ODESSA, TEXAS 79769-9210
 PHONE: 915-337-4744

FEBRUARY 9, 1989 SAMPLE RECEIVED: 02/02/89

KERR-McGEE CORP.
 4602 W. CO. RD.
 ODESSA, TEXAS 79764

WATER ANALYSIS: STATE F#2 WSW 500FT. MILENSAND N.M., LAB 224:
DISSOLVED SOLIDS

| <u>CATIONS:</u> | MEQ/L | IONIC MG/L |
|--------------------------------|-------|------------|
| SODIUM, Na | 13.20 | 304 |
| CALCIUM, Ca | 0.28 | 6 |
| MAGNESIUM, Mg | 0.20 | 2 |
| <u>ANIONS:</u> | | |
| CHLORIDE, Cl | 5.49 | 195 |
| SULFATE, SO ₄ | 4.83 | 232 |
| CARBONATE, CO ₃ | 0.64 | 19 |
| BICARBONATE, HCO ₃ | 2.72 | 166 |
| <u>TOTAL DISSOLVED SOLIDS:</u> | | 924 |

OTHER PROPERTIES:

| | | | |
|------------------|----------|-----------------------------------|------------------|
| pH | 8.4 | P-ALKALINITY AS CaCO ₃ | 16 MG/L |
| IRON | 1.0 MG/L | M-ALKALINITY AS CaCO ₃ | 168 MG/L |
| H ₂ S | 0.00 | CONDUCTIVITY | 990 MICROMOHS/CM |
| CO ₂ | 0.00 | CALCIUM HARDNESS | 14 MG/L |
| SPECIFIC GRAVITY | 1.000 | MAGNESIUM HARDNESS | 10 MG/L |
| | | TOTAL HARDNESS | 24 MG/L |

NOTE: SAMPLES CONTAINING HAZARDOUS AND TOXIC SUBSTANCES WILL BE RETURNED TO POINT OF ORIGIN FOR DISPOSAL. IF THIS IS NOT POSSIBLE AND MOBILE ANALYTICAL LABORATORIES HAS TO DISPOSE OF THE SAMPLE IN ACCORDANCE WITH EPA REGULATIONS, THEN ADDITIONAL CHARGES WILL BE BILLED TO COVER THE COST OF DISPOSAL OF THIS SAMPLE.

RECEIVED
 FEB 17 1989
 OIL & GAS DIVISION
 JOINT VENTURE

MOBILE ANALYTICAL LABORATORIES
P.O. BOX 69210
ODESSA, TEXAS 79769-9210
PHONE: 915-337-4744

FEBRUARY 9, 1989

SAMPLE RECEIVED: 02/02/89

KERR-McGEE CORP.
4602 W. CO. RD.
ODESSA, TEXAS 79764

WATER ANALYSIS: STATE F#3 WSW 500FT. MILENSAND N.M., LAB 225:
DISSOLVED SOLIDS

| <u>CATIONS:</u> | MEQ/L | IONIC MG/L |
|--------------------------------|-------------|------------|
| SODIUM, Na | ___12.75___ | ___293___ |
| CALCIUM, Ca | ___0.36___ | ___7___ |
| MAGNESIUM, Mg | ___0.12___ | ___1___ |
| <u>ANIONS:</u> | | |
| CHLORIDE, Cl | ___4.86___ | ___173___ |
| SULFATE, SO ₄ | ___5.17___ | ___248___ |
| CARBONATE, CO ₃ | ___0.56___ | ___17___ |
| BICARBONATE, HCO ₃ | ___2.64___ | ___161___ |
| <u>TOTAL DISSOLVED SOLIDS:</u> | | ___900___ |

OTHER PROPERTIES:

| | | | |
|------------------|----------------|-----------------------------------|--------------------|
| pH | ___8.3___ | P-ALKALINITY AS CaCO ₃ | ___14 MG/L___ |
| IRON | ___1.0 MG/L___ | M-ALKALINITY AS CaCO ₃ | ___160 MG/L___ |
| H ₂ S | ___0.00___ | CONDUCTIVITY | 1,010 MICROMOHS/CM |
| CO ₂ | ___0.00___ | CALCIUM HARDNESS | ___18 MG/L___ |
| SPECIFIC GRAVITY | ___1.000___ | MAGNESIUM HARDNESS | ___6 MG/L___ |
| | | TOTAL HARDNESS | ___24 MG/L___ |

NOTE: SAMPLES CONTAINING HAZARDOUS AND TOXIC SUBSTANCES WILL BE RETURNED TO POINT OF ORIGIN FOR DISPOSAL. IF THIS IS NOT POSSIBLE AND MOBILE ANALYTICAL LABORATORIES HAS TO DISPOSE OF THE SAMPLE IN ACCORDANCE WITH EPA REGULATIONS, THEN ADDITIONAL CHARGES WILL BE BILLED TO COVER THE COST OF DISPOSAL OF THIS SAMPLE.

REC'D

FEB 15 1989

SWD