



Amoco Production Company

ENGINEERING CHART

SHEET NO. OF

FILE

APPN

SUBJECT STATE HR NO. 1

DATE 6-5-80

UND. AIRSTRIIP WOLECAMP

BY R.W.

UNIT C, 330' FNL & 1980' FWL, SEC. 36, T-18-S, R-34-E
LEA COUNTY, NEW MEXICO

ELEVATION: 3935.6' G.L.

COMPLETED:

13 $\frac{3}{8}$ " CSA 302.8'
48# H-40 ST&C
CMT $\frac{1}{325}$ SXS.CIRC.
17 $\frac{1}{2}$ " HOLE.

9 $\frac{5}{8}$ " CSA 3990.3'
33# K-55
CMT $\frac{1}{1585}$ SXS.CIRC.
12 $\frac{1}{4}$ " HOLE.

5 $\frac{1}{2}$ " LINER AT 4250'
TOP OF LINER
AT 3500'

2 $\frac{3}{8}$ " PLASTIC COATED
INJECTION TUBING LANDED
IN A COATED PLASTIC
INJECTION PACKER

PSA 4650'
TAILPIPE LANDED AT 4710'
PERFS: 4744'-4764'
4900'-5100' 100 SXS. CMT PLUG

5780'-5880' 50 SXS. CMT PLUG

7750'-7850' 50 SXS. CMT PLUG

9020'-9120' 50 SXS. CMT PLUG

9350'-9450' 50 SXS CMT PLUG

10190'-10290' 50 SXS CMT PLUG

10480'-10580' 50 SXS CMT PLUG

TD-10975'
PBD-4900'

P. O. BOX 1468
MONAHANS, TEXAS 79756
PHONE 943-3234 OR 563-1040

Martin Water Laboratories, Inc

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. V. E. Staley LABORATORY NO. 78096
P.O. Box 63, Hobbs, NM SAMPLE RECEIVED 7-10-80
RESULTS REPORTED 7-15-80

COMPANY Amoco Production Company LEASE State
FIELD OR POOL Air Strip
SECTION BLOCK SURVEY COUNTY Lea STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Produced (Upper Bone Springs) water - taken from State "HQ" #1. 6-27-80

NO. 2 Produced (Wolfcamp) water - taken from State "HQ" #1. 6-27-80

NO. 3 Produced (Upper Bone Springs) water - taken from State "FU" #4. 6-27-80

NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1252	1.1166	1.1329	
pH When Sampled				
pH When Received	6.7	6.8	6.3	
Bicarbonate as HCO ₃	417	251	307	
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	12,000	11,500	26,800	
Calcium as Ca	3,120	3,080	6,560	
Magnesium as Mg	1,021	923	2,527	
Sodium and/or Potassium	69,605	64,318	67,830	
Sulfate as SO ₄	2,650	2,800	1,700	
Chloride as Cl	113,630	105,108	122,153	
Iron as Fe	31.2	48.8	23.4	
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	190,443	176,480	201,077	
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	0.0	0.0	0.0	
Resistivity, ohm-in at 77° F.	0.060	0.063	0.058	
Suspended Oil				
Filtrable Solids as mv/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

P08 3039550

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED --
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Wheeler Oil Co.
1610 C & S Bldg
Houston, TX

CONSULT POSTMASTER FOR FEES	
OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	CERTIFIED FEE
SPECIAL DELIVERY	80¢
RESTRICTED DELIVERY	
SHOW TO WHOM AND DATE DELIVERED	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	45¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	
TOTAL POSTAGE AND FEES	\$1.53
POSTMARK OR DATE	

JUL 1980

P08 3039561

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED --
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Wheeler Oil Co.
Box 670
Holt, CA

CONSULT POSTMASTER FOR FEES	
OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	CERTIFIED FEE
SPECIAL DELIVERY	80¢
RESTRICTED DELIVERY	
SHOW TO WHOM AND DATE DELIVERED	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	45¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	
TOTAL POSTAGE AND FEES	\$1.53
POSTMARK OR DATE	

JUL 1980

P08 3039583

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED --
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Wheeler Oil Co.
900 Wheeler Bldg.
Midland, TX

CONSULT POSTMASTER FOR FEES	
OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	CERTIFIED FEE
SPECIAL DELIVERY	80¢
RESTRICTED DELIVERY	
SHOW TO WHOM AND DATE DELIVERED	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	45¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	
TOTAL POSTAGE AND FEES	\$1.53
POSTMARK OR DATE	

JUL 1980

P08 3039582

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED --
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Wheeler Oil Co.
P.O. Drawer 2960
Midland, TX

CONSULT POSTMASTER FOR FEES	
OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	CERTIFIED FEE
SPECIAL DELIVERY	80¢
RESTRICTED DELIVERY	
SHOW TO WHOM AND DATE DELIVERED	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	45¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	
TOTAL POSTAGE AND FEES	\$1.53
POSTMARK OR DATE	

JUL 1980

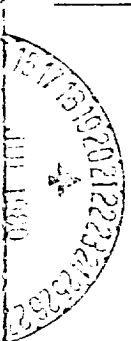
P08 3839554

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Superior Oil Co.
Box 1531
Houston, TX.

CONSULT POSTMASTER FOR FEES	
CERTIFIED FEE	\$
OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	
SPECIAL DELIVERY	
RESTRICTED DELIVERY	
SHOW TO WHOM AND DATE DELIVERED	
SHOW TO WHOM AND DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	
TOTAL POSTAGE AND FEES	\$1.53
POSTMARK OR DATE	



P08 3839565

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Chas. F. Hallerum
Suite 1000
Midland, TX

CONSULT POSTMASTER FOR FEES	
CERTIFIED FEE	\$
OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	
SPECIAL DELIVERY	
RESTRICTED DELIVERY	
SHOW TO WHOM AND DATE DELIVERED	
SHOW TO WHOM AND DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	
TOTAL POSTAGE AND FEES	\$1.53
POSTMARK OR DATE	



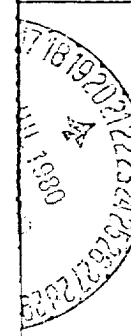
P08 3839566

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

2401 S
Box 2267
Midland, TX

CONSULT POSTMASTER FOR FEES	
CERTIFIED FEE	\$
OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	
SPECIAL DELIVERY	
RESTRICTED DELIVERY	
SHOW TO WHOM AND DATE DELIVERED	
SHOW TO WHOM AND DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	
TOTAL POSTAGE AND FEES	\$1.53
POSTMARK OR DATE	



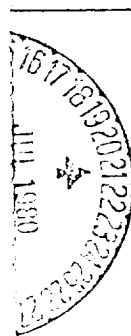
P08 3839567

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

2401 S
Box 2267
Midland, TX

CONSULT POSTMASTER FOR FEES	
CERTIFIED FEE	\$
OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	
SPECIAL DELIVERY	
RESTRICTED DELIVERY	
SHOW TO WHOM AND DATE DELIVERED	
SHOW TO WHOM AND DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	
TOTAL POSTAGE AND FEES	\$1.53
POSTMARK OR DATE	



P08 3839568

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO	
Bass + Richardson 100 Fort Worth Dr. P.O. Box 2267 Ft. Worth, TX	
POSTAGE	\$
CERTIFIED FEE	\$
SPECIAL DELIVERY	\$
RESTRICTED DELIVERY	\$
SHOW TO WHOM AND DATE DELIVERED	\$
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	\$
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	\$
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	\$
TOTAL POSTAGE AND FEES	\$1.53
POSTMARK OR DATE	

