

BEFORE EXAMINATION	
Oil Cons.	Oil Cons.
Phillips	1
☒ Disposal	☐ Storage
CASE NO. ☐ No	8526

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ Yes ☐ No

II. Operator: Phillips Petroleum Company

Address: 4001 Penbrook Odessa, Texas 79762

Contact party: T. H. McLemore

Phone: (915) 367-1257

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

- Proposed average and maximum daily rate and volume of fluids to be injected;
- Whether the system is open or closed;
- Proposed average and maximum injection pressure;
- Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
- If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: W. J. Mueller

Title: Sr. Engineering Supervisor

Signature: [Signature]

Date: 1/30/85

If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

III. WELL DATA (PROPOSED)

A. Injection Well

1. Name: Artesia SWD, Well No. 1, 660' FSL, 1980' FEL
Section 7, T-18-S, R-28-E.
2. Casing:
Surface: 8 5/8" OD, 24#/ft, K-55 @ + 350'. Cement to
surface w/± 300 sx. 12 1/4" hole size.

Production: 5 1/2" OD, 14#/ft, K-55 @+4100'. Cement to
surface w/±750 sx. Hole size 7 7/8".
3. Tubing: 2 7/8" OD, 6.5#/ft @ ±3300'. Internally plastic coated.
4. Packer: Baker Model AD-1 @ ± 3300'. Internally and externally
plastic coated.

B. Injection Zone

1. Name: Lower San Andres and Glorieta.
2. Injection Interval: ± 3370' - 3975', perforated.
3. Purpose: Injection.
4. Other Intervals: None.
5. Producing Formations
Upper: Grayburg @ ± 2050'
Lower: None

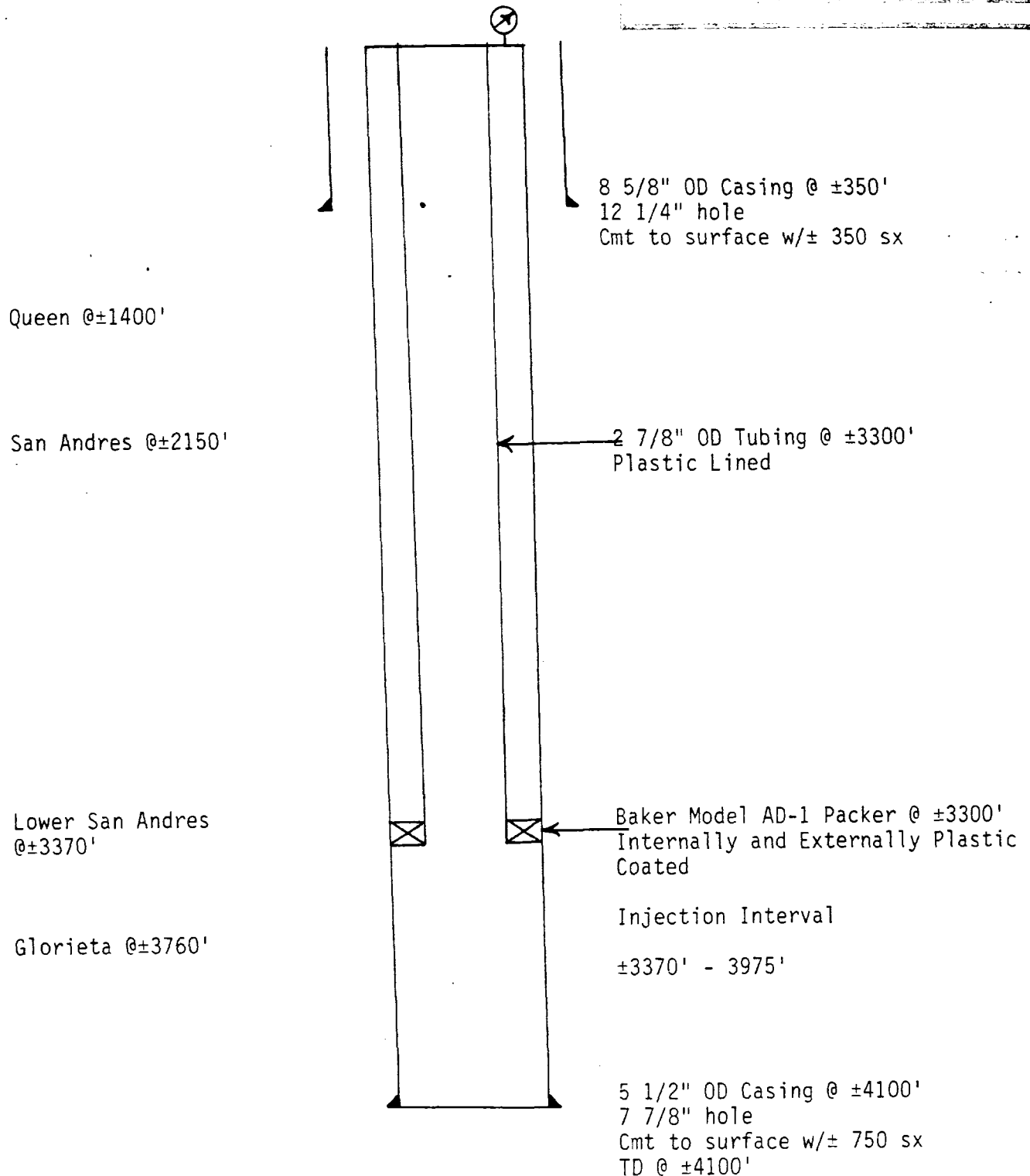
VI. OFFSET WELLS

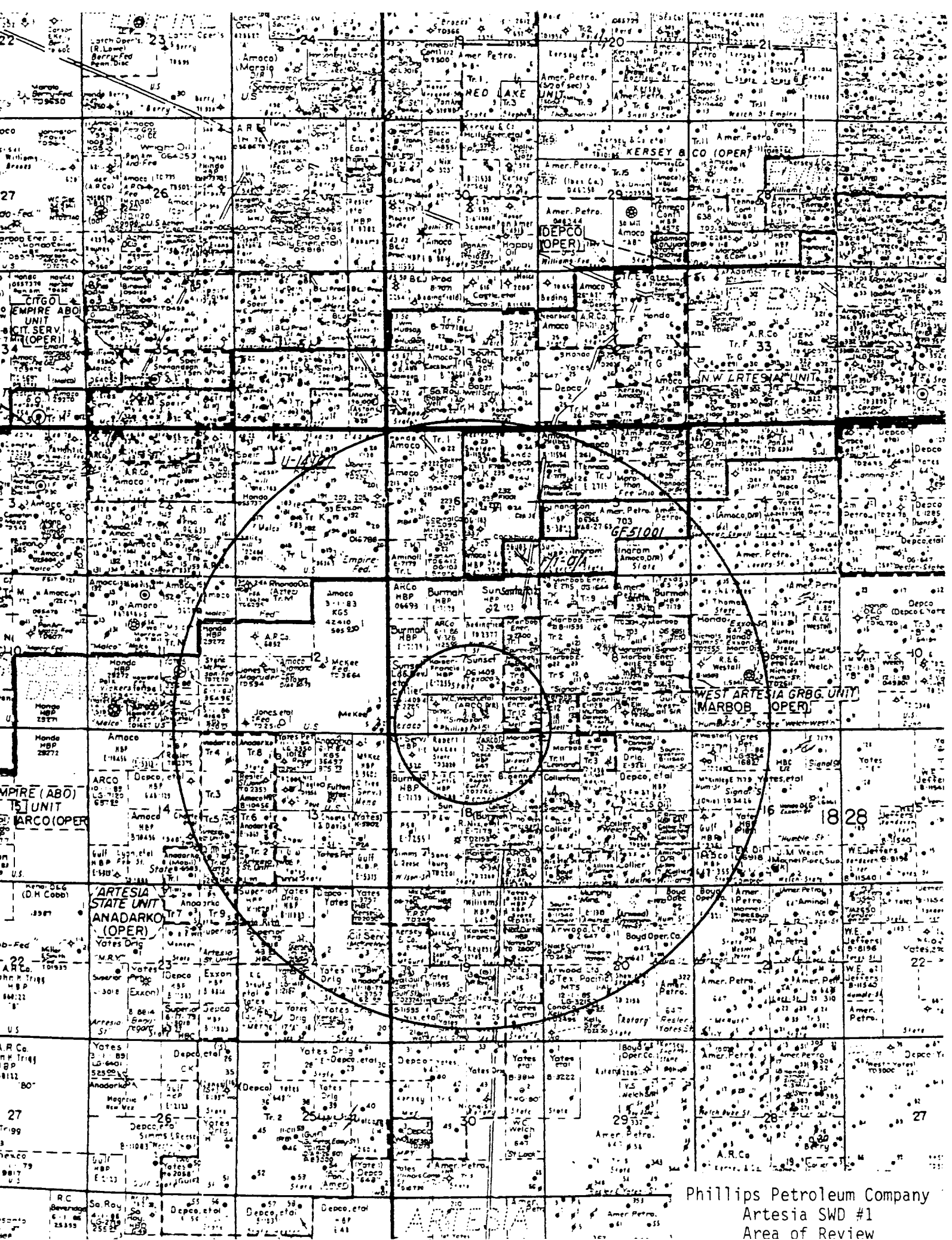
1. No wells within the area of review penetrate the proposed injection interval.

VII. PROPOSED OPERATIONS

1. Injection Rate: 1500 BWPD Average
2000 BWPD Maximum
2. Closed System
3. Injection Pressure: 500 psi Average
655 psi Maximum
4. Plant cooling water (analysis attached)

Phillips Petroleum Company
Artesia SWD Well No. 1
330' FSL, 2310' FEL, Section 7, T-18-S, R-28-E
Proposed Completion





Phillips Petroleum Company
Artesia SWD #1
Area of Review

ARTESIA SWD WELL NO. 1

TABLE OF OFFSET WELLS

Lease/Well No. (Operator)	Unit Letter	Type & Date Drilled	TD	Hole Size	Casing Size & Wt.	Depth	Cement	TOC	Remarks
<u>Section 7, T-18-S, R-28-E</u>									
Texaco State #1 (Collier)	M	Dry Hole 12/21/61	2285' (2161')	10" 8-1/4"	8-5/8" 4-1/2"	450' 2268'	50 sx 200 sx	195' (C) 1498' (C)	Perfs 1600'-2130', P&A, See Attached Sketch
Simpson Federal #1 (Welch)	N	P&A 06/16/25	2620' (1700')	12-1/2"* 8-1/4"*	10" -	422' 2620'	Mudded -	- -	O.H. 422'-2620', P&A, See Attached Sketch
Texaco State #2 (Kersy & Co)	J	Oil 02/20/62	2362' (2333')	10" 8"	8-5/8" 4-1/2"	466' 2352'	50 sx 150 sx	108' (C) 1723' (C)	Perfs 2054'-2108'
West Artesia GRBG Tract 12 #15 (Marbob)	P	SI Oil 09/01/50	2236'	14-1/2"* 12-1/2" 10"	12-1/2" 10" 8-5/8"	186' 376' 497'	None None 50 sx	- - 139' (C)	O.H. 497'-2236'
West Artesia GRBG Tract 12 #14 (Marbob)	P	Oil 08/29/58	2225' (2222')	12-1/2" 9-1/2"* 8"	10" 8-5/8" 5-1/2"	112' 460' 2215'	None 30 sx 80 sx	Pulled 245' (C) 1760' (C)	Perfs 1937'-2163'
Simpson #2 (Welch)	N	Dry Hole 07/25/67	1795'	10" 8-1/4"*	8-5/8" -	407' 1795'	50 sx -	170' (C) -	P&A, See Attached Sketch
West Artesia GRBG Tract 8 #25 (Marbob)	I	Oil 07/04/81	2530' (2500')	12-1/4" 7-7/8"*	8-5/8" 4-1/2"	477' 2523'	300 sx 62% sx	Surface (C) Surface (C)	Perfs 1917'-2490'
<u>Section 8, T-18-S, R-28-E</u>									
West Artesia GRBG Tract 12 #16 (Marbob)	M	Oil 07/10/50	2493'	14-1/2"* 12-1/2" 10"	12-1/2" 10" 8-5/8"	129' 375' 503'	None None 50 sx	- - 145' (C)	O.H. 503'-2493'

RE2.1/artesia

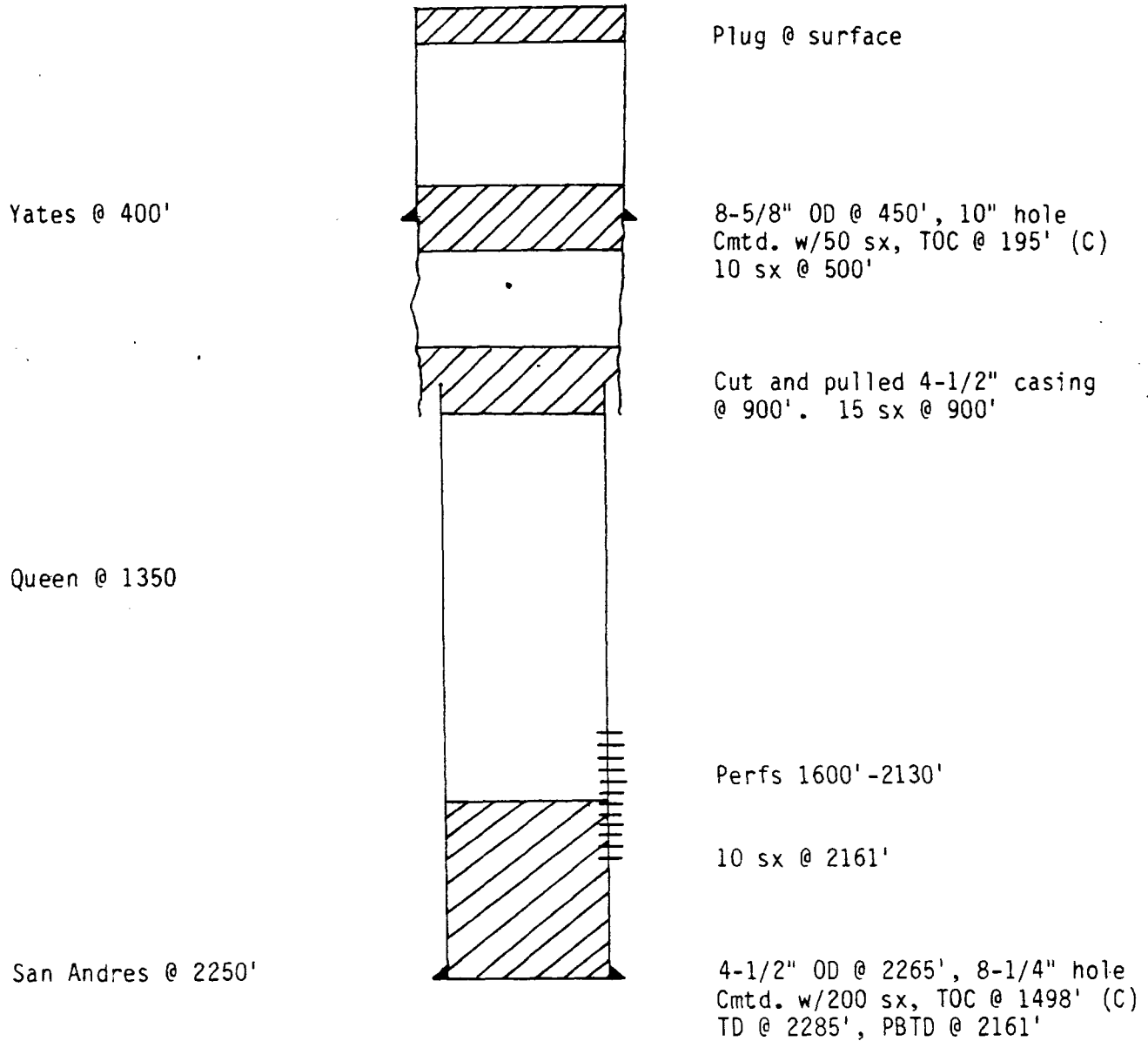
ARTESIA SMD WELL NO. 1

TABLE OF OFFSET WELLS

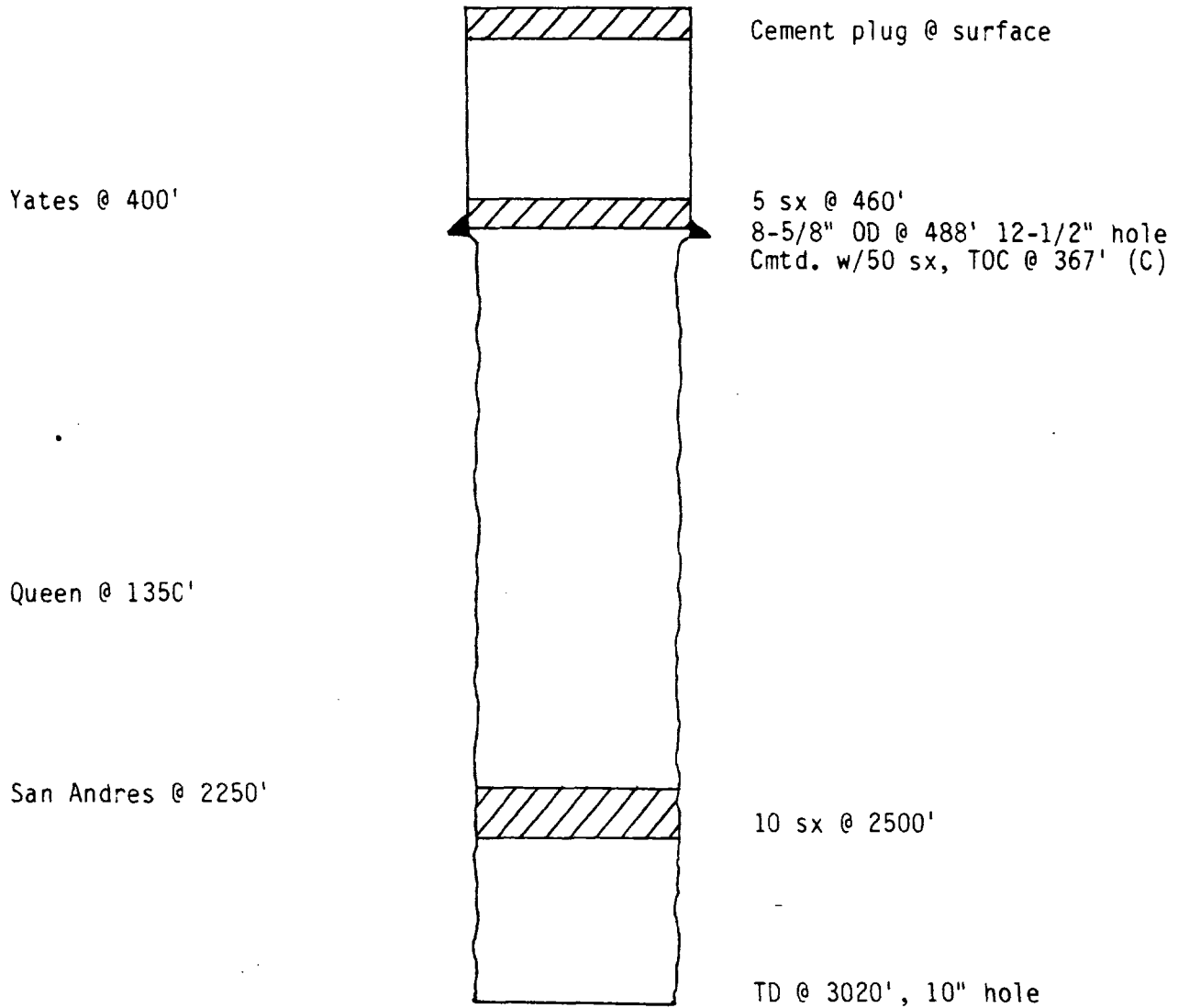
Lease/Well No. (Operator)	Unit Letter	Type & Date Drilled	TD	Hole Size	Casing Size & Wt.	Depth	Cement	TOC	Remarks
Section 18, T-18-S, R-28-E									
Jennings #1 (Marbob)	A	Oil 08/05/81	2634'	12-1/4" 7-7/8"	8-5/8" 4-1/2"	518' 2634'	175 sx 550 sx	- 220' (C)	Perfs 1725'-2596'
State E #1 (McKee)	D	Dry Hole 08/20/57	3020'	14-1/2" 12-1/2" 10"	12-1/2" 10" 8-5/8"	96' 272' 488'	None None 50 sx	- - 130' (C)	PA, See Attached Sketch

JLU/sdi
RE2.1/artesia.1

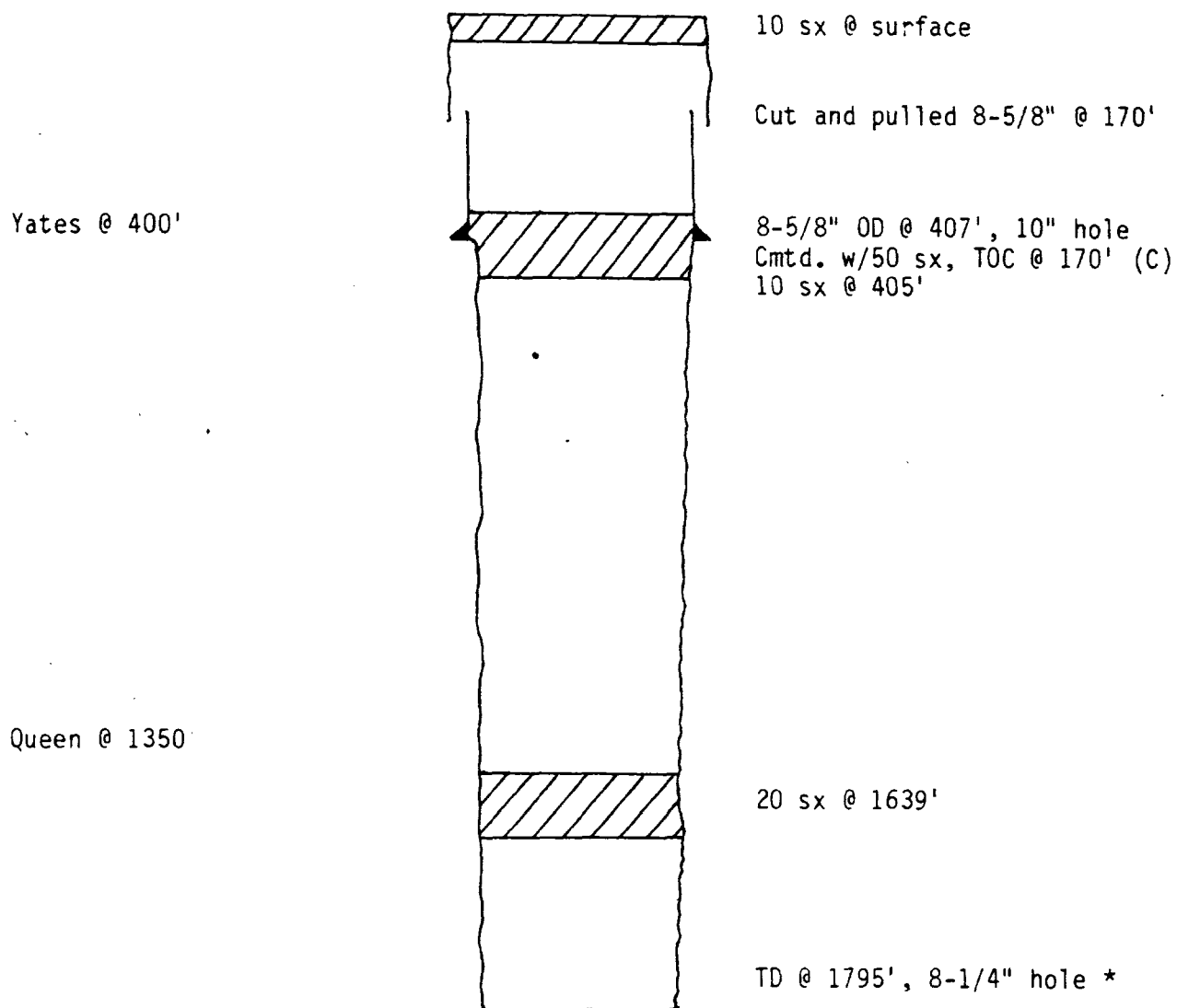
Texaco State #1
 660" FSL, 660' FWL, Section 7
 T-18-S, R-28-E



State E #1
660' FNL, 722' FWL, Section 18
T-18-S, R-28-E



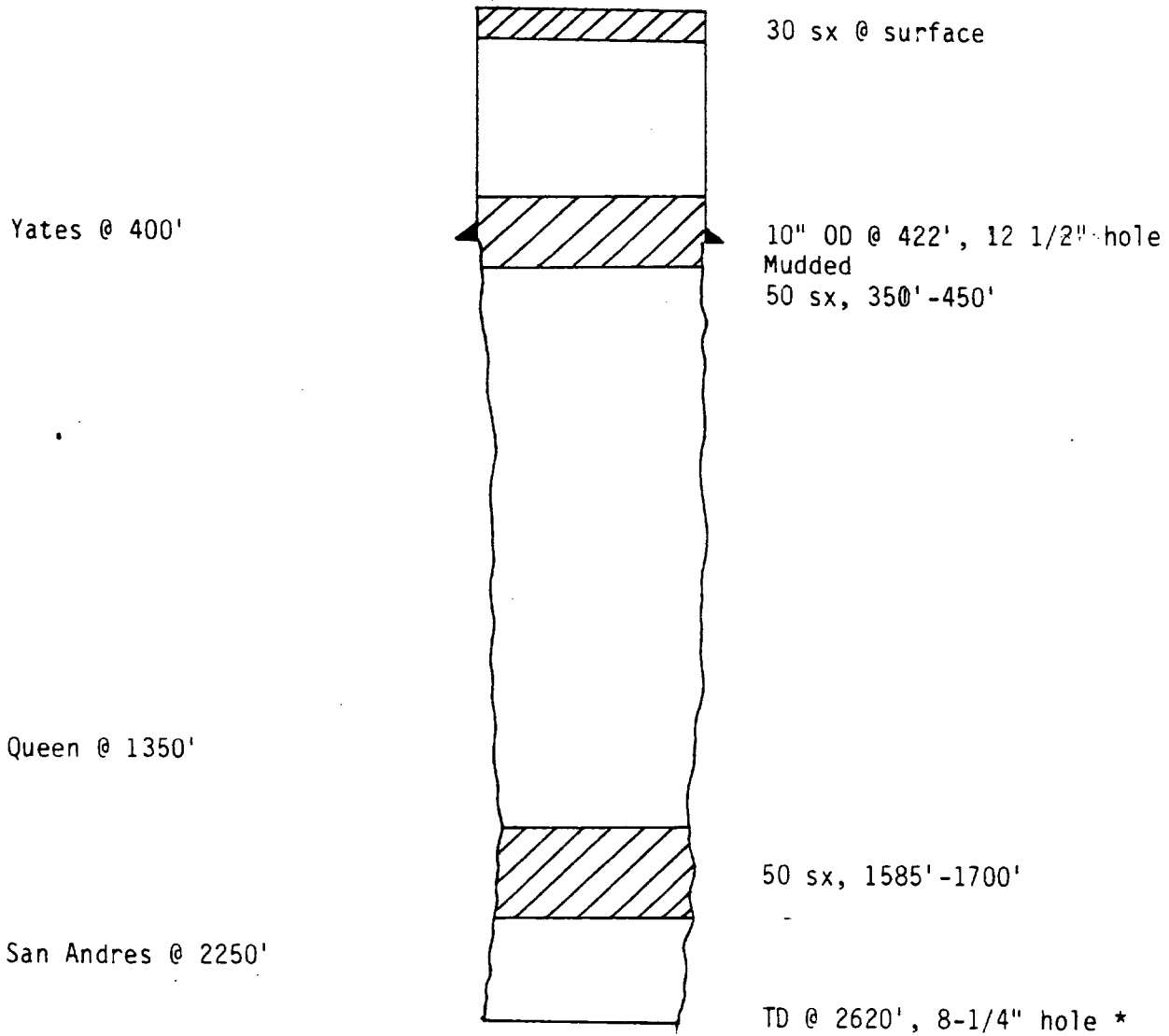
Simpson #2
 990' FSL, 1650' FWL, Section 7
 T-18-S, R-28-E



* estimate

RE2.1/artesial

Simpson-Federal #1
450' FSL, 1650' FWL, Section 7
T-18-S, R-28-E



* estimate

RE2.1/artesia2



SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915-683-3348] • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-W
Customer No. 3355796
Report No. 35020

Report Date 1-24-84

Date Received 12-21-83

Report of tests on: Water

Client: Phillips Petroleum

Identification: Artesia Plant, Wastewater

	mg/L
Aluminum-----Less Than	2
Arsenic-----Less Than	0.05
Barium-----Less Than	1
Boron-----	0.4
Cadmium-----Less Than	0.01
Chromium-----	0.14
Cobalt-----Less Than	0.1
Copper-----Less Than	0.1
Iron-----	0.3
Lead-----Less Than	0.05
Manganese-----	0.06
Mercury-----Less Than	0.002
Molybdenum-----Less Than	1
Nickel-----Less Than	0.5
Selenium-----Less Than	0.01
Silver-----Less Than	0.05
Zinc-----	0.06
Sulfate-----	357
Chloride-----	638
Fluoride-----	1.8
Nitrate-----	0.5
Cyanide-----Less Than	0.001
Phenols-----	0.060
Total Dissolved Solids @ 180° C-----	1984

Technician: KLH, PCB, GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Larry M. Bunch

COMPATABILITY TEST
ARTESIA PLANT WATER AND SAN ANDRES WATER
ANALYSIS BY UNICHEM INTERNATIONAL, HOBBS, N.M.

Plant Water (%)	90	0
Produced Water (%)	10	100
Specific Gravity	1.011	1.106
Total Dissolved Solids	18,919	157,864
pH	8.76	6.61
Cations		
Calcium (ppm)	374	2538
Magnesium (ppm)	435	3322
Sodium (ppm)	6,297	53,591
Anions		
Bicarbonate (ppm)	64.6	536.0
Carbonate (ppm)	48.6	0.0
Hydroxide (ppm)	0	0
Sulfates (ppm)	799	5875
Chlorides (ppm)	10,900	92,000
Iron (ppm)	0.7	0.4
Barium (ppm)	0.27	Not Run
Ionic Strength (Molal)	0.367	3.155
Carbonate Index @ 86 F	1.150	0.403
Calcium Carbonate		
Scaling?	Likely	Likely
Calcium Sulfate Index	-37.0	13.7
Calcium Sulfate		
Scaling?	Unlikely	Likely



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119904

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

Client # 3355796

File No. C-1950-W

Report No. 35938

Report Date 11-28-84

Date Received 11-7-84

Report of tests on: Water (Fresh water)

Client: Phillips Petroleum Company

Identification: Artesia West Windmill

Aluminum-----	less than 2
Arsenic-----	less than 0.05
Barium-----	less than 0.5
Boron-----	0.6
Cadmium-----	less than 0.01
Chromium-----	less than 0.05
Cobalt-----	less than 0.1
Copper-----	less than 0.1
Iron-----	0.3
Lead-----	less than 0.05
Manganese-----	0.07
Mercury-----	less than 0.002
Molybdenum-----	less than 0.5
Nickel-----	less than 0.5
Selenium-----	less than 0.01
Silver-----	less than 0.05
Zinc-----	0.09

Sulfate-----	286
Chloride-----	227
Fluoride-----	2.3
Nitrate-----	less than 0.5
Cyanide-----	less than 0.001
Phenols-----	0.008

Total Dissolved Solids @180°C----- 1226

Technician KLH, GMB, RY

Copies Phillips Petroleum Company
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Larry M. Bunch



SOUTHWESTERN LABORATORIES

119804

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915-683-3348] • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-W
Customer No. 3355796
Report No. 35197
Report Date 3-22-84
Date Received 2-29-84

port of tests on: Water (Fresh Water)
src Phillips Petroleum
refraction: Artesia Upgrad. Windmill, East Windmill

	mg/L
Aluminum-----Less Than	2
Arsenic-----Less Than	0.05
Barium-----Less Than	1
Boron-----	0.1
Cadmium-----Less Than	0.01
Chromium-----Less Than	0.05
Cobalt-----Less Than	0.1
Copper-----Less Than	0.1
Iron-----Less Than	0.2
Lead-----Less Than	0.05
Manganese-----Less Than	0.05
Mercury-----Less Than	0.002
Molybdenum-----Less Than	1
Nickel-----Less Than	0.5
Selenium-----Less Than	0.01
Silver-----Less Than	0.05
Zinc-----	0.13
Sulfate-----	17
Chloride-----	7
Fluoride-----	0.5
Nitrate-----	6.6
Cyanide-----	0.002
Phenols-----Less Than	0.001
Total Dissolved Solids @ 180° C-----	178

analysis: KLE, GMB, JHB, RY

samples 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

VIII. INJECTION ZONE GEOLOGY

1. Dolomite and sandy dolomite
2. Lower San Andres and Glorieta
3. Thickness $\pm 700'$
4. Depth $\pm 3250' - 3975'$
5. Ogallala Aquifer $\pm 250'$

IX. STIMULATION

1. Perforate and acidize w/ ± 5000 gallons of 15% NEFE HCl

X. LOG-DATA

1. Will be submitted when well is drilled.

XII. FAULTING

1. No faults are known to exist in the area.

PHILLIPS PETROLEUM COMPANY
Artesia SWD Well No. 1
Sec. 7, T-18-S, R-28-E,
Eddy County, NM

OFFSET OPERATORS

ARCO Oil and Gas Corp . Box 1610 Midland, TX 79702	Kaiser-Francis Oil Co. Box 21468 Tulsa, OK 74121-1468	Sun Exp. & Production Company Box 1861 Midland, TX 79702
Brad & Robert Hillin (B.Bennett) Box 2062, Midland, TX 79702	Kaiser-Francis Oil Co. 3300 N. A. St., Ste 111A Midland, TX 79701	Texaco Inc. Box 728 Hobbs, NM 88240
Burmah Oil & Gas Co. 600 Western United Bldg. Midlandk TX 79701	Marbob Energy Corporation Box 304 Artesia, NM 88210	W. C. Welch Rte 1, Box 74A Artesia, NM 88210
Cities Service Oil Co. Box 1919, Midland, TX 79702	Nix & Curtis Box 617, Artesia, NM 88210	C. O. Fulton Box 1121 Artesia, NM 88210
Depco 800 Central Dr. Odessa, TX 79760	J. M. Welch Box 408 Artesia, NM 88210	
Byard Bennett 7011 N. Camino Martin Tucson, AZ 85704		

SURFACE OWNER: Phillips Petroleum Company (within Artesia Plant yard)



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

CERTIFIED

P 503 931 299

MAIL

C.O. Fulton
Box 1121
Artesia, NM 88210

CERTIFIED

P 503 931 300

MAIL

Depco
800 Central Dr.
Odessa, TX 79760

CERTIFIED

P 503 931 301

MAIL

Nix & Curtis
Box 617
Artesia, NM 88210

CERTIFIED

P 503 931 302

MAIL

ties Service Oil & Gas
Box 1919
Midland, TX 79702

CERTIFIED

P 503 931 303

MAIL

J. M. Welch
Box 408
Artesia, NM 88210

CERTIFIED

P 503 931 304

MAIL

MARBOB ENERGY CORP.
Box 304
Artesia, NM 88210

CERTIFIED

P 503 931 305

MAIL

Welch
Box 74A
Artesia, NM 88210

CERTIFIED

P 503 931 307

MAIL

Burmah Oil & Gas Co.
600 West United Life Bldg.
Midland, TX 79701

CERTIFIED

P 503 931 308

MAIL

Byard Bennett
7011 N. Camino Martin
Tucson, AZ 85704

CERTIFIED

P 503 931 309

MAIL

KAISER-FRANCIS OIL CO.
Box 21468
Tulsa, OK 74121-1468

CERTIFIED

P 503 931 310

MAIL

KAISER-FRANCIS OIL CO.
3300 N. "A" ST. STE. 111A
MIDLAND, TX 79701

CERTIFIED

P 503 931 311

MAIL

Brad & Robert Hillin
(Bennett)
P.O. Box 2062
Midland, TX 79701

CERTIFIED

P 503 931 312

MAIL

CERTIFIED

P 503 931 313

MAIL

exaco, Inc.
Box 728

CERTIFIED

P 503 931 314

MAIL

Sun Exploration & Production



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

January 31, 1985

Legal Notice - Classified
Application for SWD Well,
Artesia Plant, Eddy County

Artesia Daily Press
Box 179
Artesia, NM 88210

Attn: Legal Notices, Classified

Gentlemen:

Enclosed is notice of application for Oil Conservation Division, Dept. of Energy and Minerals, approval for a salt water disposal well to serve the Artesia Plant. Also enclosed is a certification of publication which is to be completed and returned to me. It is requested that this notice run on February 5, 1985.

Please direct billing and the certification of publication to my attention at the letterhead address.

Very truly yours,

T. Harold McLemore

THM:se
Enclosures

NOTICE is hereby given of the application of Phillips Petroleum Company
Attention: E. E. Clark, -AGENT, 4001 Penbrook Street,
Odessa, Texas 79762 - telephone (915) 367-1290, to the Oil Conser-
vation Division, New Mexico Energy & Minerals Department for approval -
of the following injection well(s) for the purpose of salt water disposal
at its Artesia Plant

Well(s) No(s).: 1 (one)

Lease/Unit Name: Artesia SWD

Location: Unit O, 660' FS and 1980' FE lines, Section 7, T-18-S, R-28-E,

NMPM,

Eddy County, New Mexico.

The injection formation is Lower San Andres and Glorieta at a depth
of 3370-3975 feet below the surface of the ground. Expected maximum
injection rate is 2000 barrels per day, and expected maxi-
mum injection pressure is 655 pounds per square inch. Interested
parties must file objections or requests for hearing with the Oil Conser-
vation Division, P. O. Box 2088, Santa Fe, New Mexico 87501, within fif-
teen days of this publication.

Affidavit of Publication

Copy of Publication

No. 10967

STATE OF NEW MEXICO,
County of Eddy:

..... Gary D. Scott being duly
sworn, says: That he is the Business Manager of The
Artesia Daily Press, a daily newspaper of general circulation,
published in English at Artesia, said county and state, and that
the hereto attached Legal Notice

.....
was published in a regular and entire issue of the said Artesia
Daily Press, a daily newspaper duly qualified for that purpose
within the meaning of Chapter 167 of the 1937 Session Laws of
the State of New Mexico for 1 days
consecutive weeks on
the same day as follows:

First Publication February 25, 1985

Second Publication

Third Publication

Fourth Publication

and that payment therefor in the amount of \$.....
has been made

Subscribed and sworn to before me this 7th day
of March, 1985

Barbara Ann Boers
Notary Public, Eddy County, New Mexico

My Commission expires September 23, 1987

LEGAL NOTICE

AMENDED NOTICE

NOTICE is hereby given of
the application of Phillips
Petroleum Company.

Attention: E.E. Clark, agent,
4001 Penbrook Street,
Odessa, Texas 79762 —
telephone (915) 367-1290, to
the Oil Conservation Divi-
sion, New Mexico Energy &
Minerals Department for ap-
proval of the following injec-
tion well(s) for the purpose of
salt water disposal at its
Artesia Plant.

Well(s) No(s): 1 (one)

Lease/Unit Name: Artesia
SWD

Location: Unit O, 330' FS and
2310' FE lines, Section 7,
T-18-S, R-28-E, NMPM, Eddy
County, New Mexico.

The injection formation is
Lower San Andres and
Glorieta at a depth of
3370-3975 feet below the sur-
face of the ground. Expected
maximum injection rate is
2000 barrels per day, and ex-
pected maximum injection
pressure is 655 pounds per
square inch. Interested par-
ties must file objections or
requests for hearing with the
Oil Conservation Division,
P.O. Box 2088, Santa Fe, New
Mexico 87501, within fifteen
days of this publication.

Published in The Artesia
Daily Press, Artesia, N.M.,
Feb. 25, 1985.

Legal No. 10967.