STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

PMX-44

RE: Proposed:
MC _____
DHC _____
NSL _____
NSP _____
SWD _____
WFX _____
PMX XX

Gentlemen:

I have examined the application for the:

Tr. 6 #85-C 35-17-35
Tr. 10 #3-N 34-17-35
Tr. 10 #9-J 34-17-35
Tr. 13 #14-H 4-18-35
Tr. 13 #19-P 5-18-35

Phillips Petroleum Inc. Vacuum Abo Unit
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK -- Jerry Sexton

Yours very truly,,

Jerry Sexton

/Jerry Sexton
Supervisor, District 1

/mc

STATE OF NEW MEX
ENERGY AND MINERALS DEPA..MENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

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 Street

Contact party: L. M. Sanders Phone: (915) 367-1488

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 R-3181,R-3181-A, R-3181-B

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:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. 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 Eng. Supervisor, Reservoir

Signature: W. J. Mueller Date: 1/2/87

* 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. January 4, 1967, Case No. 3509, Application for Pressure Maintenance Project, Amended Aug. 27, 1969 Case No. 4194 & Oct. 12, 1983 Case No. 7974

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

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;

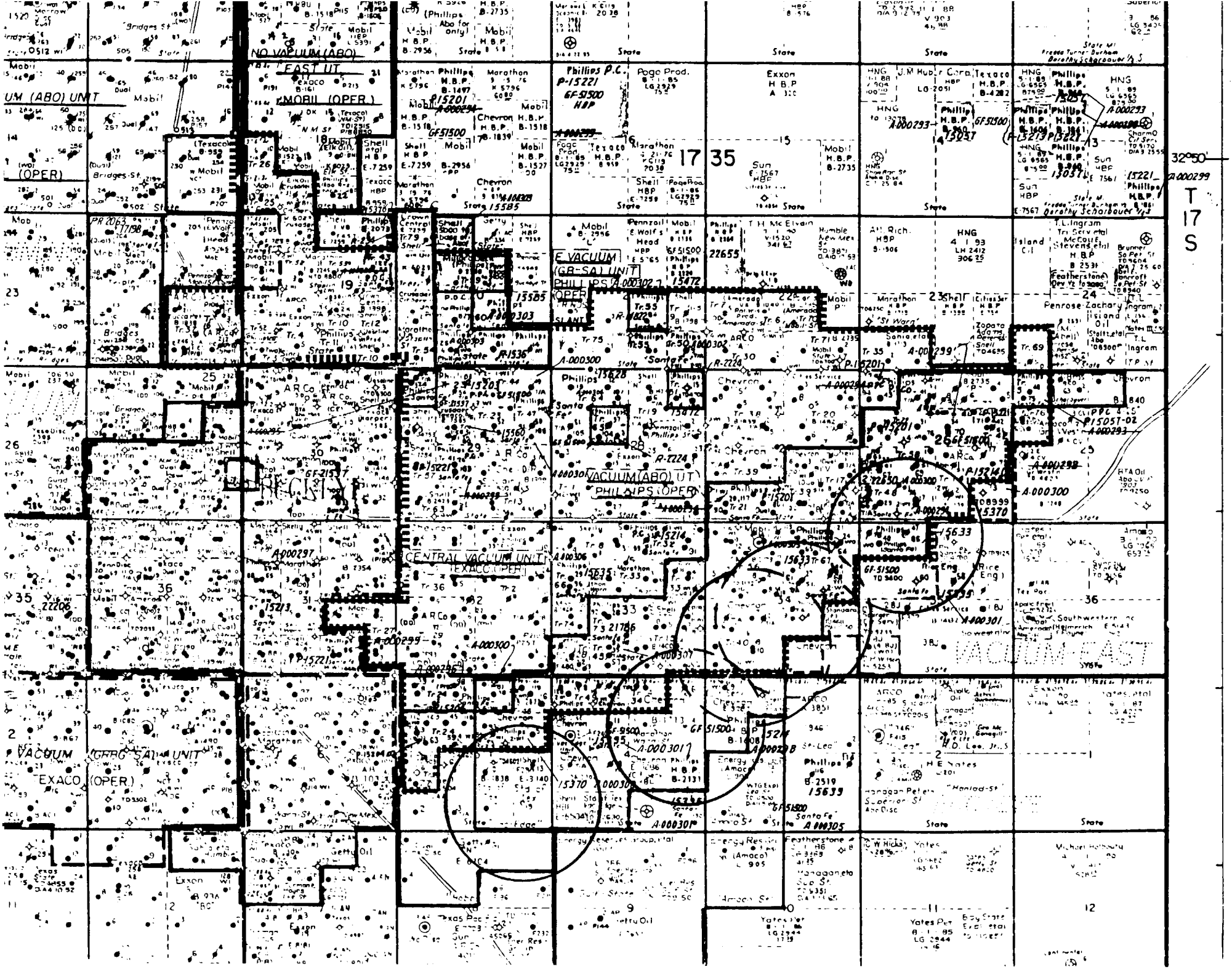
(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells:

(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.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VACUUM ABO UNIT PRESSURE MAINTENANCE AREA

LEA COUNTY, NEW MEXICO

TABULATION OF ABO WELLBORE PENETRATIONS

T.S.--TEMPERATURE SURVEY; CIRC.--CIRCULATED; CALC.--CALCULATED

OPERATOR LEASE & WELL NO.	LOCATION U S T R	WELL TYPE	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	PRODUCING DEPTH FT	TOTAL DEPTH FT	DATE DRILLED
Phillips Petroleum Co. Vacuum Abo Unit																	
F	O 26 17 35	WI	13-3/8"	322'	325	Circ.	8-5/8"	3150'	300	1195' Calc	4-1/2"	8990'	875	453' Calc	8660'-8676' Abo	8681' PBTD	6/62
Abo perfs 8695'-8851' sqzd w/100 sx cmt; left cmt plug in hole to 8730'. Abo perfs 8705'-8719' abandoned w/hydromite plug 8705'-8730'; drld out hydromite and cement plugs, then perfed Abo 8810'-8820' and sqzd w/150 sx cmt below cmt rtnr to 8772'. Abo perfs 8695'-8719' abandoned with hydromite plug 8681'-8772'. Drld out all hydromite and cmt plugs, then perfed Abo 8661'-8840' and converted to wtr.inj.																	
6-66	M 26 17 35	P	13 3/8"	322'	350	Circ.	8-5/8"	3246'	400	2100' TS	5-1/2"	9132'	615	1700' TS	8408'-8514' Abo	8540' PBTD	4/62
8446'-8868' sqzd Abo perfs. 8556' 8586' below Hydromite plug top @ 8540'. Reperf'd 8408'-8514'.																	
6-67	L 26 17 35	P	13-3/8"	335'	350	Circ.	8-5/8"	3275'	400	2000' TS	5-1/2"	9033'	520	2700' TS	8366'-8390' Abo	8391' PBTD	5/62
Abo perfs 8512'-8856' sqzd w/200 sx cmt, left cmt plug in hole to 8605', Abo perfs 8535'-8604' abandoned with hydromite plug 8530'-8605'; Abo perfs 8505'-8525' with hydromite plug 8496'-8530'; Abo perfs 8450'-8484' abandoned with hydromite plug 8414'-8496'; Abo perfs 8398'-8410' abandoned with hydromite plug 8391'-8414'.																	
6-74	N 26 17 35	P	13-3/8"	312'	350	Circ.	8-5/8"	3355'	400	2300' TS	5-1/2"	9000'	525	750' TS	8628'-8686' Abo	8700' PTD	10/62
Abo perfs 8656'-8892' sqzd 10/62. Reperf'd 8628'-8686'.																	
6-69	K 26 17 35	P	13-3/8"	309'	350	Circ.	8-5/8"	3358'	400	2500' TS	5-1/2"	9099'	600	2600' TS	8416'-8469' Abo	8485' PTD	6/62
A' perfs 8496'-8810' below CIBP @ 8485'.																	
RE/Wellbore																	

TABULATION OF ABO WELLBORE PENETRATIONS

T.S.--TEMPERATURE SURVEY; CIRC.--CIRCULATED; CALC.--CALCULATED

OPERATOR LEASE & WELL NO.	LOCATION U S T R	WELL TYPE	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	PRODUCING DEPTH FT	TOTAL DEPTH FT	DATE DRILLED
7-3	P 27 17 35	P	13-3/8"	300'	250	Circ.	8-5/8"	3154'	200 TOC	1150' TS	5-1/2"	9095'	700	2600 Calc.	8344'-8450' Abo	8500' PBTD	5/62
Abo perfs, 8526'-8553' below hydromite top @ 8500'. Cmt plug 8544'-8632'. Abo perfs 8632'-8672' below hydromite top @ 8608'. Cmt plug 8700'-9100'.																	
-3	N 5 18 35	P	13-3/8"	313'	190	Circ.	8-5/8"	3233'	250	1670' Calc.	4-1/2"	9107'	200	5600' Calc.	8561'-8830' Abo	9079' PBTD	9/61
11-5	O 33 17 35	P	13-3/8"	318'	300	Circ.	8-5/8"	3166'	950	Circ.	5-1/2"	9003'	500	Surface Calc.	8682'-8730' Abo	8735' PBTD	2/61
Abo perfs 8745'-8780' below CIBP @ 8735' capped w/50' hydromite plug to 8735'.																	
11-6	P 33 17 35	P	13-3/8"	297'	275	Circ.	8-5/8"	3133'	1050	Circ.	5-1/2"	9099'	525	Surface Calc.	8616'-8730' Abo	8740' PBTD	4/61
Abo perfs 8746'-8786' below CIBP @ 8743'.																	
11-7	I 33 17 35	P	13-3/8"	314'	290	Circ.	9-5/8"	3099'	1125	Circ.	5-1/2"	9203'	800	Surface Calc.	8634'-8900' Abo	9172' PTD	8/61
6-61	G 34 17 35	P	13-3/8"	334'	350	Circ.	8-5/8"	3250'	400	1500' TS	5-1/2"	9099'	656	1100' TS	8630'-8640' Abo	8640' PBTD	1/62
Abo perfs 8886'-8912' under CIBP @ 8841' capped w/6' cmt to 8835'; Abo perfs 8721'-8833' abandoned with hydromite plug 8721'-8835'; Abo perfs 8698'-8721' abandoned w/hydromite plug 8695'-8721'; Abo perfs 8668'-8688' abandoned w/hydromite plug 8654'-8695'; Abo perfs 8640'-8650' abandoned w/hydromite plug 8640'-8654'.																	
6-64	H 34 17 35	P	13-3/8"	316'	350	Circ.	8-5/8"	3244'	400	1000' TS	5-1/2"	9100'	520	1600' TS	8536'-8874' Abo	9067' PTD	4/62

RE/wellbore1

VACUUM ABO UNIT PRESSURE MAINTENANCE AREA

LEA COUNTY, NEW MEXICO

TABULATION OF ABO WELLBORE PENETRATIONS

T.S.--TEMPERATURE SURVEY; CIRC.--CIRCULATED; CALC.--CALCULATED

OPERATOR LEASE & WELL NO.	LOCATION U S T R	WELL TYPE	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	PRODUCING DEPTH FT	TOTAL DEPTH FT	DATE DRILLED
6-65	B 34 17 35	P	13-3/8"	310'	350	Circ.	8-5/8"	3271'	400	2000' TS	5-1/2"	9093'	544	3100' TS	8451'-8526' Abo	8565' CIBP	2/62
Abo perfs 8574'-8898' below CIBP @ 8565'.																	
E	H 34 17 35	WI	13-3/8"	344'	350	Circ.	8-5/8"	3400'	400	2600' TS	5-1/2"	9000'	495	3950' TS	8698'-8909' Abo	8957' PBTD	7/63
Abo perfs 8734'-8885' abandoned with hydromite plug 8717'-8912'; drld out hydromite plug, then perfed Abo 8698'-8909' and converted to wtr. inj.																	
B-9	F 34 17 35	P	10-3/4"	328'	550	Circ.	7-5/8"	3600'	1000	Circ. TS	5-1/2" Liner top @ 3416	9100'	950	Circ.	8408'-8788' Abo	9049'	5/62
B-10	E 34 17 35	P	10-3/4"	324'	450	Circ.	7-5/8"	3600'	1300	Circ. TS	5-1/2"	9100'	550	3540' TS	8462'-8898' Abo	9063' PTD	3/62
B-11	C 34 17 35	P	10-3/4"	335'	450	Circ.	7-5/8"	3600'	1220	460' TS	5-1/2"	9100'	750	Circ.	8384'-8908' Abo	9064' PTD	4/62
10-5	M 34 17 35	P	13-3/8"	304'	375	Circ.	8-5/8"	3120'	1250	Circ.	5-1/2"	9100'	679	3195' TS	8694'-8740' Abo	8750' PBTD	4/61
Abo perfs 8883'-8993' squeezed with 200 sx cmt., left cement plug in hole to 8852'. Abo perfs 8770'-8790' abandoned with sand and hydromite plug 8760'-8852'. Abo perfs 8730'-8748' abandoned with hydromite plug 8724'-8750'.																	
10-6	L 34 17 35	P	13-3/8"	309'	375	Circ.	8-5/8"	3135'	1225	Circ.	5-1/2"	9100'	679	3280' TS	8702'-8833' Abo	8852' PBTD	7/62
Abo perfs 8860'-8888'. BP capped w/1 sk cmt @8860'.																	

VACUUM ABO UNIT PRESSURE MAINTENANCE AREA

LEA COUNTY, NEW MEXICO

TABULATION OF ABO WELLBORE PENETRATIONS

T.S.--TEMPERATURE SURVEY; CIRC.--CIRCULATED; CALC.--CALCULATED

OPERATOR LEASE & WELL NO.	LOCATION U S T R	WELL TYPE	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	PRODUCING DEPTH FT	TOTAL DEPTH FT	DATE DRILLED
10-7	K 34 17 35	P	13-3/8"	305'	375	Circ.	8-5/8"	3140'	1250	970' TS	5-1/2"	9099'	679	2960' TS	8534'-8549' Abo	8557' PBTD	10/62
Abo perfs 8855'-8987' sqzd w/200 sx cmt, left cement plug in hole to 8807', Abo perfs 8760' 8780' abandoned with hydromite plug 8756'-8807', Abo perfs 8700'-8720' abandoned with hydromite plug 8683'-8756', Abo perfs 8636'-8671' abandoned with hydromite plug 8623'-8683', Abo perfs 8578'-8596' abandoned with hydromite plug 8557'-8623'.																	
10-8	N 34 17 35	P	13-3/8"	302'	375	Circ.	8-5/8"	3193'	1350	400' TS	5-1/2"	9099'	679	3185' TS	8759'-8775' Abo	8776' PBTD	5/62
Abo perfs 8777'-8805' plugged with cement to 8777'. Abo perfs 8840'-8898' sqzd with 75 sx . Abo perfs 8920'-8998' sqzd with 300 sx . Abo perfs 9014'-9016' below CIBP @ 8966' sqzd with 10 sx.																	
10-9	J 34 17 35	P	13-3/8"	307'	350	Circ.	8-5/8"	3210'	1400	Circ.	5-1/2"	9099'	679	570' TS	8754'-8844' Abo	8863' PBTD	7/62
Abo perfs 8882'-8940' below hydromite plug @ 8863'.																	
13-9	D 3 18 35	WI	13-3/8"	316'	375	Circ.	8-5/8"	3301'	400	Circ.	5-1/2"	9139'	640	3300' TS	8800'-9084' Abo	9100' PBTD	5/61
8841'-9085' sqzd w/90 sxs. 12/65. Reperforated from 8800'-9084' for WI-2/85.																	
6-78	D 35 17 35	P	13-3/8"	336'	350	Circ.	8-5/8"	3368'	400	2500' TS	5-1/2"	9000'	535	2500' TS	8612'-8632' Abo	8643' PBTD	5/63
Abo perfs 8708'-8892' sqzd w/130 sx cmt, left cmt plug in hole to 8708'; Abo perfs 8670'-8708' abandoned with hydromite plug 8643'-8708'.																	
6-85	C 35 17 35	P	13-3/8"	314'	350	Circ.	8-5/8"	3424'	400	2500' TS	5-1/2"	8950'	590	2200' TS	8848'-8874' Abo	8880' PBTD	9/63
Abo perfs 8884'-8896' & 8900'-8901' temp. aban. below CIBP @ 8880'.																	
1. .	B 4 18 35	GI	13-3/8"	317'	300	Circ.	8-5/8"	3216'	1200'	Circ.	5-1/2"	8890'	1045	1658' Calc	8364'-8762' Abo	8823' PTD	5/61
Perfs 8364'-8400' used for gas inj. DV tool @ 6883', packer @ 8555'.																	

RE/wellbore3

TABULATION OF ABO WELLBORE PENETRATIONS

T.S.--TEMPERATURE SURVEY; CIRC.--CIRCULATED; CALC.--CALCULATED

OPERATOR LEASE & WELL NO.	LOCATION U	S	T	R	WELL TYPE	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	PRODUCING DEPTH FT	TOTAL DEPTH FT	DATE DRILLED
13-6	A	4	18	35	P	13-3/8"	322'	350	Circ.	8-5/8"	3263'	1200	Circ. Calc.	5-1/2"	9144'	488	3290' TS	8608'-8627' Abo	8627' PBTD	7/62
Abo perfs 8627' 9045' plugged with hydromite plug top @ 8627'. Abo perfs 8938'-9045' sqzd w/100 sx.																				
11	F	4	18	35	P	13-3/8"	305'	375	Circ.	8-5/8"	3244'	1250	Circ.	5-1/2"	9100'	670	3240' TS	8530'-8696' Abo	8696' PBTD	11/61
Abo perfs 8696'-8740' plugged with hydromite plug @ 8696'. Abo perfs 8748'-8857' below CIBP @ 8740'(8799'-8855' sqzd w/150 sx 4/70). Abo perfs 8879'-8996' below CIBP @ 8868'.																				
13-12	G	4	18	35	P	13 3/8"	304'	375	Circ.	8-5/8"	3220'	1250	Circ.	5-1/2"	9100'	929	3080' TS	8716'-8732' Abo	8737' PBTD	5/61
Abo perfs 8803'-8884' sqzd 50 sx;Abo perfs 8737'- 8767' plugged with hydromite top @ 8737'; 8748'-8770' below CIBP @ 8740'; 8879'-8996' below CIBP @ 8868' 8803'-8910' & 8929'-9020' sqzd 300 sx BP @ 8794'.																				
13-14	H	4	18	35	P	13-3/8"	308'	375	Circ.	8-5/8"	3105'	1250	Circ.	5-1/2"	9100'	690	3100' TS	8804'-8820' Abo	8820' PBTD	11/61
Abo perfs 8874'-8960' sqzd with 125 sx cmt plug 8847'-9056', 8820'-8847' with hydromite plug top @ 8820'.																				
13-15	L	4	18	35	P	13-3/8"	316'	375	Circ.	8-5/8"	3036'	1250	Circ.	5-1/2"	9099'	648	3000' TS	8558'-8582' Abo	8591' PBTD	11/61
Abo perfs 8650'-8710' sqzd 150 sx, 8857'-8993' sqzd 150 sx, 8635'-8591' plugged with hydromite @ 8591', 8750'-9060' cmt plug top @ 8750', 8635'-8750' cmt plug top @ 8635'.																				
14-1	K	5	18	35	P	13-3/8"	316'	290	Circ.	8-5/8"	3200'	200	2000' TS	4-1/2"	9006'	690	2500' Calc.	8250'-8840' Abo	8977' PTD	7/61

ellbore4

VACUUM ABO UNIT PRESSURE MAINTENANCE AREA

LEA COUNTY, NEW MEXICO

TABULATION OF ABO WELLBORE PENETRATIONS

T.S.--TEMPERATURE SURVEY; CIRC.--CIRCULATED; CALC.--CALCULATED

OPERATOR LEASE & WELL NO.	LOCATION U S T R	WELL TYPE	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	PRODUCING DEPTH FT	TOTAL DEPTH FT	DATE DRILLED
13-5	H 5 18 35	P	13-3/8"	304'	350	Circ.	8-5/8"	3276'	1050	Surface Calc.	5-1/2"	9100'	575	3265' TS	8650'-8839' Abo	9064' PTD	7/62
1[illegible] 10	J 5 18 35	P	13-3/8"	297'	350	Circ.	8-5/8"	3250'	1300	Circ.	5-1/2"	8956'	640	3250' TS	8254'-8700' Abo	8740' PBTD	9/61"
Abo perfs 8750'-8850'-sqzd w/200 sx cement; left cement plug in hole to 8740'.																	
13-13	I 5 18 35	P	13-3/8"	326'	375	Circ.	8-5/8"	3227'	1200	160'	5-1/2"	9099'	679	3200'	8547'-8952'	9069' PBTD	11/61
13-17	O 5 18 35	P	13-3/8"	300'	375	Circ.	8-5/8"	3200'	1350	Circ.	5-1/2"	9099'	679	2590' TS	8726'-8798' Abo	8815' PBTD	10/61
Abo perfs 8905'-9024' sqzd w/125 sx, Abo perfs 8842'-8864' hydromite plug to 8815'.																	
13-19	P 5 18 35	P	13-3/8"	313'	375	Circ.	8-5/8"	3310'	1400	420' Calc.	5-1/2"	9093'	679	3170' Calc.	8666'-8690' Abo	8696' PBTD	9/61
Plugged back from 8841'-8720' w/sand; from 8720'-8696' w/hydromite @ 8696'.																	
13-7	G 5 18 35	P	13-3/8"	297'	350	Circ.	8-5/8"	3233'	1200	Circ.	5-1/2"	8971'	529	3212' TS	8576'-8774' Abo	8948' PTD	10/61
15-3	B 8 18 35	WI	13-3/8"	304'	320	Circ.	8-5/8"	3274'	1355	Circ.	5-1/2"	9047'	810	3180' TS	8913'-9002' Abo	9007' PBTD	5/62
8932'-9029' squeezed 4/62, reperf 8913'-9002' for WI 12/6/84.																	

R[illegible] ellbores

VACUUM ABO UNIT PRESSURE MAINTENANCE AREA

LEA COUNTY, NEW MEXICO

TABULATION OF ABO WELLBORE PENETRATIONS

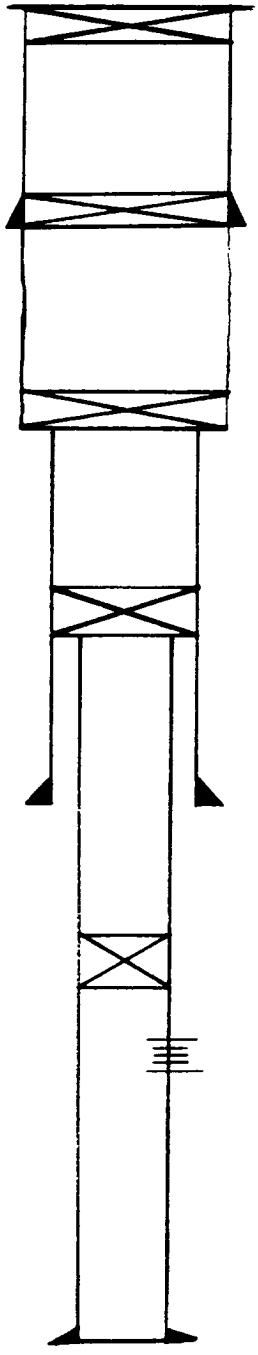
T.S.--TEMPERATURE SURVEY; CIRC.--CIRCULATED; CALC.--CALCULATED

OPERATOR LEASE & WELL NO.	LOCATION U S T R	WELL TYPE	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	CASING SIZE IN	DEPTH SET FT	SX CEMENT	TOP CEMENT FT	PRODUCING DEPTH FT	TOTAL DEPTH FT	DATE DRILLED
Cities Service Oil																	
#2	K 35 17 35	P&A	13-3/8"	321'	350	Circ.	8-5/8"	3501'	2164	Circ.	5-1/2"	9017'	500	4100'	8940'-9000'	9014' PBTD	6/61
Rice Engineering Corp. Vacuum SWD																	
#G35	G 35 17 35	SWD	13-3/8"	320'	350	Circ.	8-5/8"	3262'	400	2000' (TS)	5-1/2"	9016'	765	Circ.	4973'-5713'	6000' PBTD	7/61
BP @ 6000' cmt. plug. Abo perfs 8766'-9004' below BP @ 8596', reperf'd 4973'-5713' for WI.																	
#F35	F 35 17 35	SWD	13-3/8"	1330'	350	Circ.	8-5/8"	3253'	400	1400' (TS)	5-1/2"	4885'	250	3705' (TS)	4885'-5855' (O.H.)	5855' PBTD	10/61
Plug with 50 sx cmt 7485'-7600', plug with 200 sx cmt 5855'-6350'.																	

ellbore6

Cities Service State "BJ" #2

Unit K, Sec. 35, T-17-S, R-35-E
Lea County, New Mexico



0'-30' 10 sx. cmt. plug

17" Hole
13-3/8", 48# csg. @ 321'. Cmt'd w/ 350 sx.
TOC Circ.

3450'-3550' 35 sx. cmt. plug

12-1/4" Hole
8-5/8", 32# csg. @ 3501'. Cmt'd w/ 2164 sx.
TOC Circ.

3910'-4060' 35 sx. cmt. plug
5-1/2" csg. cut & pulled @ 3990'

CIBP @ 8900' 2 sx. cmt on top of CIBP.

Perfs 8940'-9000'

8-3/4" Hole
5-1/2", 15.5 & 17# csg. @ 9017. Cmt'd w/ 500 sx.
TOC @ 4100' (calc.)

PHILLIPS PETROLEUM COMPANY

Vacuum Abo Pressure Maintenance Project

Typical Conversion to Injection Procedure for
Tract 6, Well No. 85; Tract 10, Well No. 8; Tract 10, Well No. 9,
Tract 13, Well No. 14; and Tract 13, Well No. 19

1. Move in completion unit, circulation unit, and drill string.
2. Attach blowout prevention equipment and pull downhole production equipment out of well.
3. Drill out cement plugs to original PTD of well. Circulate hole clean.
4. Selectivity perforate the Abo Reef formation with deep penetrating DML charges at 2 JSPF.
5. Acidize perforations with 10,000 to 17,500 gallons of a 90/10 mixture of 28% Fe HCl acid and xylene.
6. Swab back load.
7. Run in and set injection packer assembly with 2-3/8" internally plastic coated tubing at a point less than 100' above top perforation.
8. Displace tubing-casing annulus with inhibited brine.
9. Move out completion unit and all other workover equipment and commence injection.

RE/wellbore7

PHILLIPS PETROLEUM COMPANY

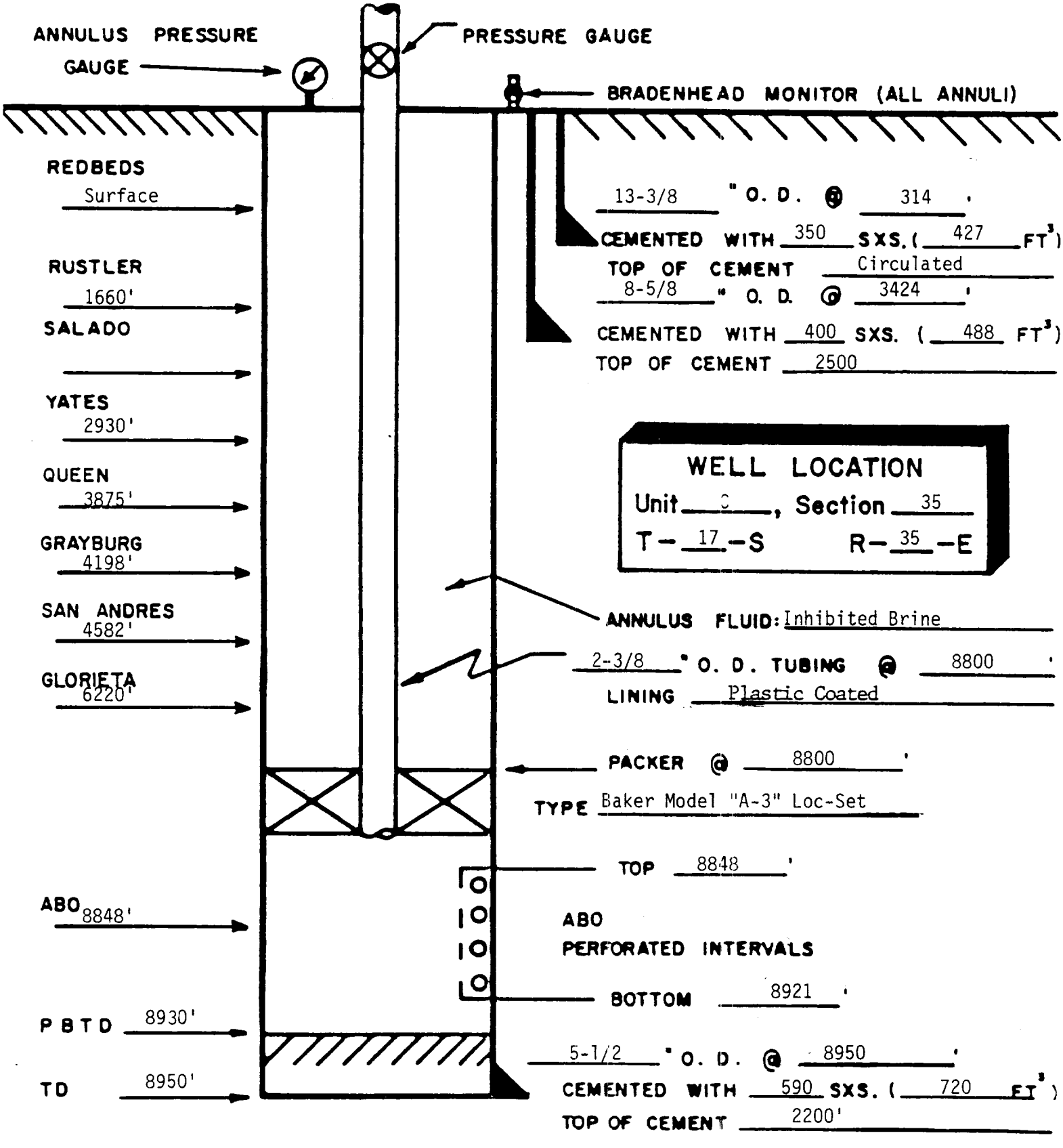
VACUUM ABO UNIT PRESSURE MAINTENANCE PROJECT

N.M.O.C.D. R-3181 & R-3181A & R-3181 B

VACUUM ABO REEF FIELD, LEA COUNTY, NEW MEXICO

TRACT 6 WELL 85

CONVERSION TO WATER INJECTION STATUS



PHILLIPS PETROLEUM COMPANY

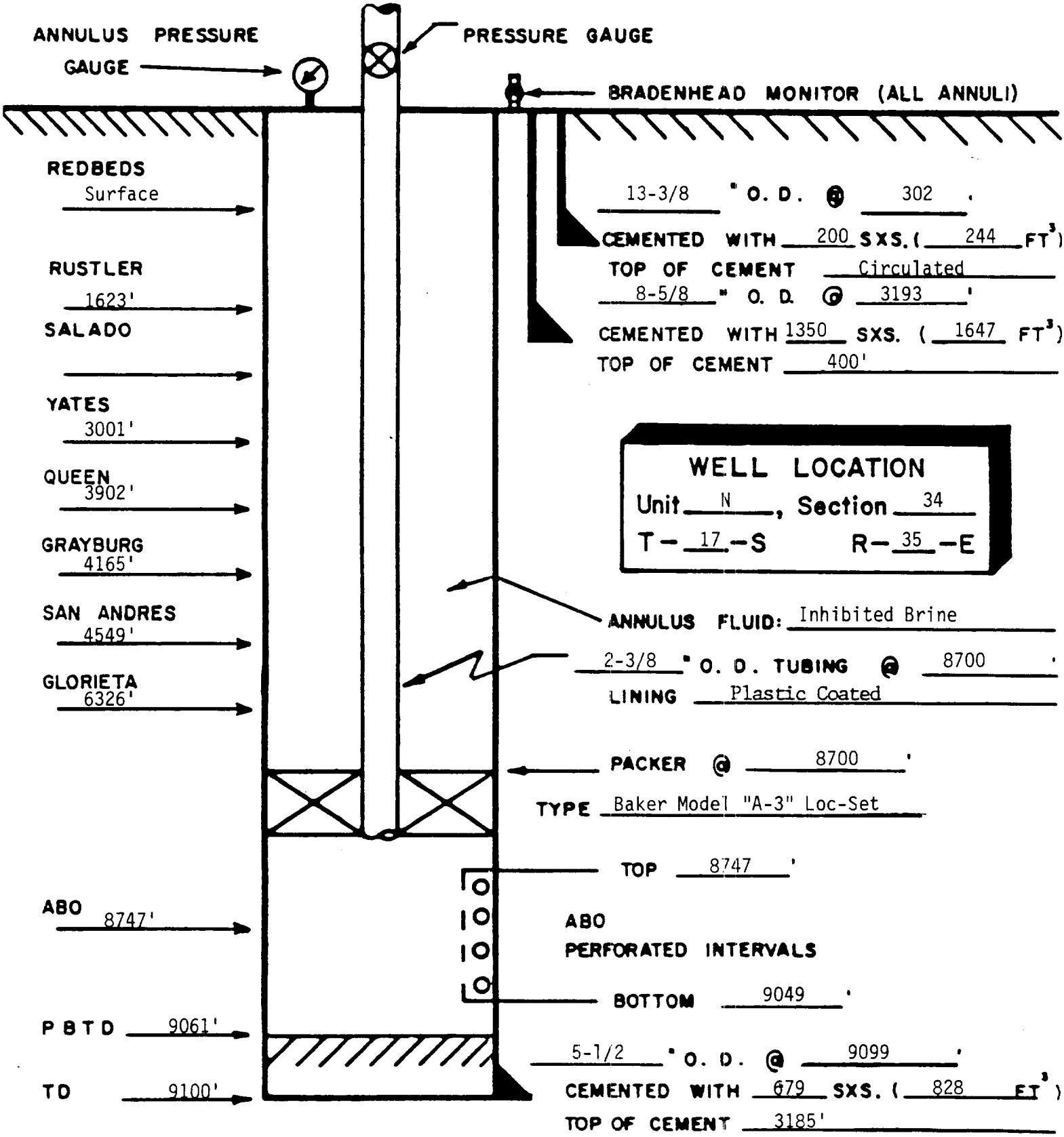
VACUUM ABO UNIT PRESSURE MAINTENANCE PROJECT

N.M.O.C.D. R-3181 & R-3181A & R-3181 B

VACUUM ABO REEF FIELD, LEA COUNTY, NEW MEXICO

TRACT 10 WELL 8

CONVERSION TO WATER INJECTION STATUS



PHILLIPS PETROLEUM COMPANY

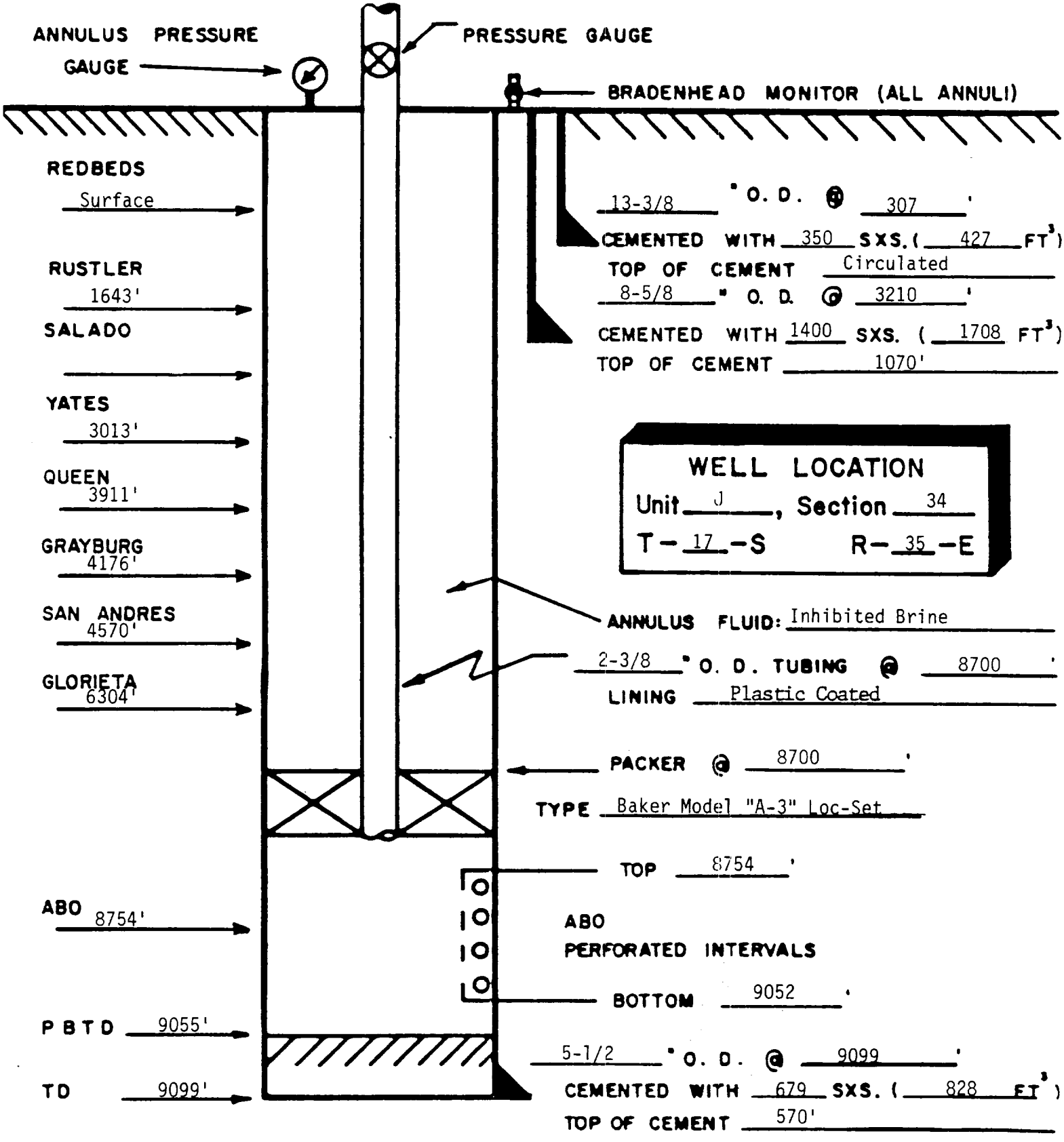
VACUUM ABO UNIT PRESSURE MAINTENANCE PROJECT

N.M.O.C.D. R-3181 & R-3181A & R-3181 B

VACUUM ABO REEF FIELD, LEA COUNTY, NEW MEXICO

TRACT 10 WELL 9

CONVERSION TO WATER INJECTION STATUS



PHILLIPS PETROLEUM COMPANY

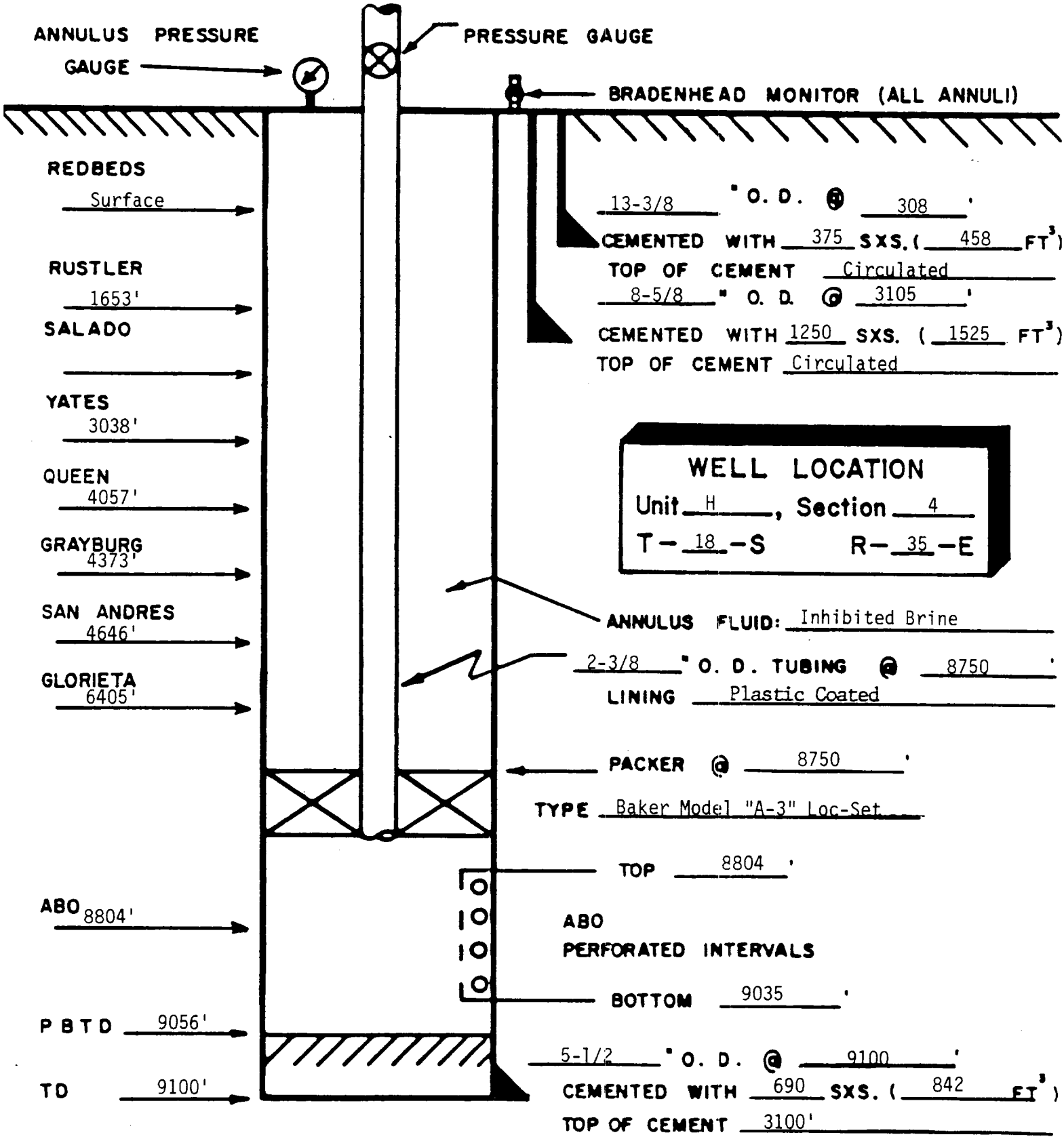
VACUUM ABO UNIT PRESSURE MAINTENANCE PROJECT

N.M.O.C.D. R-3181 & R-3181A & R-3181 B

VACUUM ABO REEF FIELD, LEA COUNTY, NEW MEXICO

TRACT 13 WELL 14

CONVERSION TO WATER INJECTION STATUS



PHILLIPS PETROLEUM COMPANY

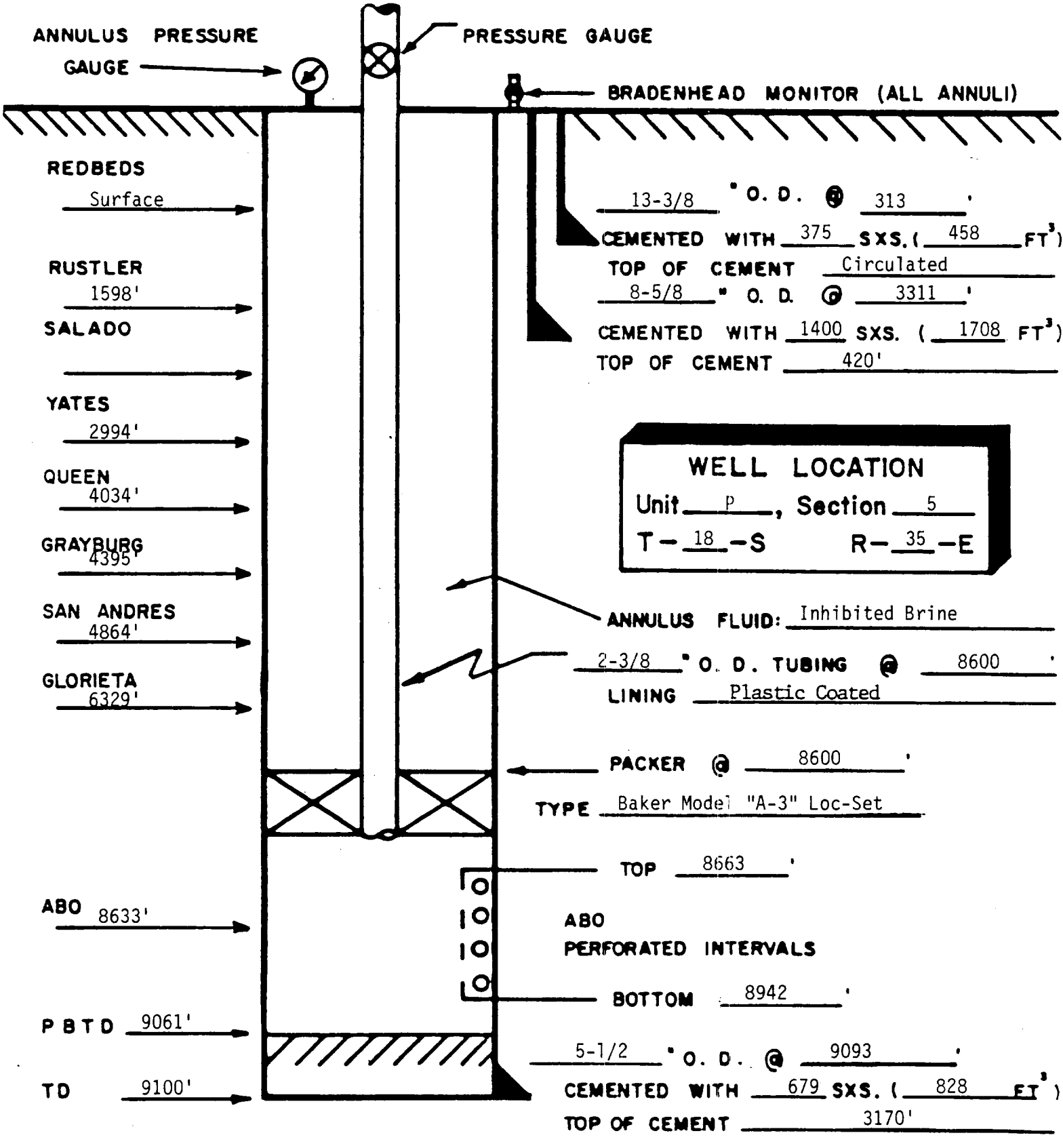
VACUUM ABO UNIT PRESSURE MAINTENANCE PROJECT

N.M.O.C.D. R-3181 & R-3181A & R-3181 B

VACUUM ABO REEF FIELD, LEA COUNTY, NEW MEXICO

TRACT 13 WELL 19

CONVERSION TO WATER INJECTION STATUS



AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, _____

Robert L. Summers

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of _____

One weeks.

Beginning with the issue dated

December 12, 19 86

and ending with the issue dated

December 12, 19 86

Robert L. Summers
Publisher.

Sworn and subscribed to before me this 12 day of December, 19 86

Vera Murphey
Notary Public.

My Commission expires

Nov. 14, 19 88

(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

39 **LEGAL NOTICE**
DECEMBER 12, 1986

Notice is hereby given of the application of Phillips Petroleum Company, Attention: J. C. Mihm, Manager, Permian Basin Region, 4001 Penbrook St., Odessa, Texas 79762 - telephone (915) 367-1488, to the Oil Conservation Division, New Mexico Energy and Minerals Department, for approval of the following injection wells for the purpose of water injection.

Well Nos.: Tract 6, Well No. 85; Tract 10, Well No. 8; Tract 10, Well No. 9; Tract 13, Well No. 14 and Tract 13, Well No. 19;

Unit Name: Vacuum Abo Unit

Location: Township 17 and 18 South, Range 35 East, Lea County, New Mexico. The injection formation is Abo Reef at an approximate depth between 8600-9000 feet below the surface of the ground. Expected maximum injection rate is 5000 barrels per day per well and expected maximum injection pressure is 3000 pounds per square inch. Interested parties must file objections or request for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico, 87501 within fifteen days of this publication.