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

4-17-90

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

PMX-156

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

RE: Proposed:
MC_____
DHC_____
NSL_____
NSP_____
SWD_____
WFX_____
PMX X

Gentlemen:

I have examined the application for the:

Shell Western E&P Inc. North Hobbs G/SA Unit Sec 27 H 241-N 27-18-38
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton

Jerry Sexton
Supervisor, District 1

/ed

Shell Western E&P Inc.
A Subsidiary of Shell Oil Company

P.O. Box 576
Houston, TX 77001

APRIL 10, 1990

CERTIFIED MAIL

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

Gentlemen:

SUBJECT: EXPANSION OF PRESSURE MAINTENANCE PROJECT
SWEPI - NORTH HOBBS (GRAYBURG/SAN ANDRES) UNIT
HOBBS (GRAYBURG/SAN ANDRES) POOL
TOWNSHIP 18 SOUTH, RANGE 38 EAST
LEA COUNTY, NEW MEXICO

Shell Western E&P Inc. hereby requests administrative approval to convert one North Hobbs (Grayburg/San Andres) Unit well to water injection. Administrative Order No. R-6199, dated November 30, 1979, authorized Shell Western to operate the North Hobbs (Grayburg/San Andres) Unit pressure maintenance project within the subject pool.

The well to be converted is the North Hobbs (GSA) Unit No. 27-241, Section 27, T18S, R38E, Lea County, New Mexico. Form C-108 and the necessary documentation to obtain the injection permit is attached.

As required, a copy of this application, complete with all attachments, has been sent to the only surface owner, Shell Oil Company, Property Administration, P. O. Box 576, Houston, Texas 77001, Attn: J. R. Pruet. Because the Area of Review is wholly within the North Hobbs (GSA) Unit boundaries, no offset operator notification was necessary.

In conjunction with the above conversion to water injection, we are also notifying you for informational purposes of our intent to return the North Hobbs (GSA) Unit 27-111W to injection. The NHGSAU 27-111W was completed in February 1970 as an open-hole Grayburg, San Andres Zone I and San Andres Zone II producer. The well was converted to water injection in the Grayburg formation only in June 1981 and was subsequently temporarily abandoned in June 1989. As we reported to you in our 1990 Plan of Development, submitted on January 31, 1990, we plan to initiate water injection into the San Andres Zone I reservoir on the east flank of the unit because it is not receiving aquifer support from the Zone I waterdrive. The NHGSAU 27-111W was reported at that time as scheduled to be returned to injection in the San Andres Zone I in 1990.

MB008702.EMS

If you have any questions concerning this application or any attachment, please contact Ellyn Schade at (713) 870-3016.

Very truly yours,

W. F. N. Kelldorf
Senior Staff Production Engineer
Health, Safety and Environment
Western Division

EMS:MB

Attachments

cc: (w/attachments)
State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
P. O. Box 1980
Hobbs, NM 88240

MB008702.EMS

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTME

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: SHELL WESTERN E&P INC.

Address: P. O. Box 576, Houston, Texas 77001

Contact party: Ellyn Schade Phone: (713) 870-3016

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-6199, November 30, 1979

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. F. N. Kelldorf Title Sr. Staff Production Engineer, Health Safety and Environment, Western Division

Signature: W F N Kelldorf Date: 4/10/90

* 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. See attached information sheet

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.

FORM C-108 REQUIRED INFORMATION
NORTH HOBBS (GSA) UNIT NO. 27-241
CONVERSION TO INJECTION

ITEM NUMBER

III. Well Data - See attached injection well data sheet. This also includes well data requested on Side 2, Part III.A. and Part III.B.

V. See attached Area of Review Map for location of NHGSAU 27-241 with a one-half mile radius circle identifying the well's area of review. The map also indicates the NHGSAU 27-111W referenced in the cover letter. The NHGSAU 27-211, which has an indicated area of review, is not being permitted at this time.

VI. This tabulation of well data supplements well data already submitted. Please reference approved orders for previously submitted data:

ORDER NO.	DATE
R-6199	11/30/79
PMX-87	8/26/80
PMX-109	08/13/81
R-6199-A	08/04/83
PMX-131	10/25/84
PMX-133	01/11/85
PMX-151	01/27/88

Also included is a schematic of the R. H. King - Sanger #1 illustrating plugging details.

VII. Proposed Operation Data:

1) Average injection rate 1500 BWPD
Maximum injection volume 2000 BWPD

2) This system is closed and is reinjecting North Hobbs (Grayburg/San Andres) Unit produced water.

3) Average injection pressure 760 psi
Maximum injection pressure 812 psi

Injection will be into the San Andres formation at an injection interval of 4060 feet to 4350 feet (open hole). Surface injection pressure will be limited to 0.2 psi per foot gradient to the top of the open-hole interval, in accordance with Rule 11 of Order No. R-6199.

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VIII. Previously submitted by earlier referenced orders.

IX. The proposed stimulation program is included on the Injection Well Data Sheet.

X. Logs from the original oil well completion were previously submitted; however, we are enclosing more recent vintage production logs for your information:

.Sidewall Neutron Porosity Log	12-17-74
.Micro-Seismogram Log - Cased Hole	10-25-80
.Sidewall Neutron Porosity Log	7-13-87
.BHC - Sonic	7-13-87

Test Data - NHU 27-241 (Old Sanger #2)

Potential Test - 1/30/35

During the potential test, the well flowed for 1 hour at a rate of 4290 BPD with 2.6% B. S. and 6600 MCF through open 3 inch tubing. From the Engineering Committee curve, the open flow potential rated at 6200 BFPD or 6039 BOPD and 6666 MCFD.

1989 Production Data

The well produced approximately 50 BOPD and 100 BWPD with a GOR of 1250 SCF/bbl during the first 9 months of 1989.

XI. No evidence exists of any active fresh water well within one mile of the well site. This statement is based on:

1) Attempts by Shell Western personnel to contact owners of water wells in the area. A list of permits containing ten acre locations with permit dates and owners was obtained from the State Engineer's office in Roswell. The wells are posted on the AOR map. We could not locate an active water well.

2) Discussions with personnel in both the Hobbs NMOCD Office (Mr. Sexton) and the Roswell State Engineer District Office (Mr. Hernandez).

XII. Does not apply.

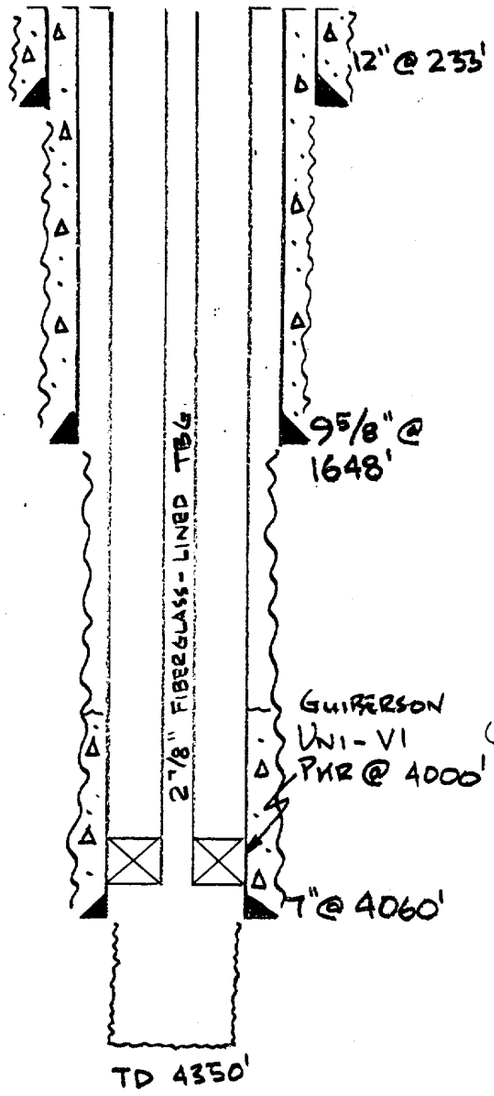
XIII. A copy of this application and attachments have been mailed, as required by "Proof of Notice" Section, to Shell Oil Company, the surface owner. There are no offset operators within the Area of Review.

Enclosed is the Legal Notice and Affidavit of Publication from the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico.

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
SHELL WESTERN E&P INC.	NORTH HOBBS UNIT			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
27-241	330' FSL & 1325' FWL	27	18-S	38-E

Schematic



Tabular Data

Surface Casing

Size 12 " Cemented with 700 sx.

TOC Surface ~~feet~~ determined by Circulation

Hole size 15"

Intermediate Casing

Size 9 5/8" Cemented with 350 sx.

TOC Surface ~~feet~~ determined by Circulation

Hole size 12 1/4"

Long string

Size 7 " Cemented with 250 sx.

TOC 3145' feet determined by CBL

Hole size 8 5/8"

Total depth 4228'

Injection interval

4060 feet to 4350 feet

(perforated or open-hole; indicate which)

(IX.) Proposed Stimulation Program

1. Clean well to PBTD
2. At OH w/5000 g 25% HCl in 4 stages w/300-500# graded rock salt between stages.
3. Run inj. equip.

Tubing size 2 7/8" lined with Fiberglass (material) set in a Guiberson Uni-VI (brand and model) packer at 4000' feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Grayburg/San Andres
2. Name of Field or Pool (if applicable) Hobbs
3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? Oil production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

   Next higher zone - Queen, 3375'

   Next lower zone - Paddock,. 5380'

AREA OF REVIEW

PROPOSED WELL

NORTH HOBBS (GB-SA) UNIT SHELL (OPER.)

SOUTH HOBBS (GB-SA) UNIT AMOCO (OPER.)

TEXAS NEW MEXICO RR

R 38 E

T 18 S

- L E G E N D -

- OIL WELL
- WATER INJECTION WELL
- DRILLED & ABANDONED
- PLUGGED & ABANDONED
- BOTTOM HOLE LOCATION
- FRESHWATER WELL

N

FROM 2F00229-00

SHELL OIL COMPANY	WESTERN E & P REGION WESTERN DIVISION	PROD DEPT

A PORTION OF
HOBBS FIELD
LEA COUNTY, NEW MEXICO
AREA OF REVIEW MAP

SCALE 0 1000' 2000' 3000' 4000'

Author P.J. CONRAD
Date 1/2/90

2D01601-000

AOR TABULATION

N.M.O.C.D. ORDER NO. R-6199
FORM C-108, ITEM VI
JANUARY 1990

LOCATION S-T-R FOOTAGE	OPERATOR WELL #	ELEV.	DATE DRILLED	TD PBTD	WELL TYPE	CASING DETAIL SIZE	WEIGHT (LB/FT)	DEPTH (FT)	CEMENT (SACKS)	TOC (FT)	DTMND BY	HOLE SIZE	COMPLETION INTERVAL
34-T18S-R38E	AMOCO	3635 GL	8/79	7050	OIL -	13.375	54.50	420	450	0	CIRC	17.5	6665-6986'
1990' FWL & 511 FWL	30			7036	DRINKARD	9.625	32.30	4403	2550	0	SQZ	12.25	
						7	20.00	7050	400	4045	TS	8.75	
							23.00						
							26.00						
34-T18S-R38E	AMOCO	3636 GL	11/84	4491	INJ -	14	36.71	40	25	0	CONSTRUCTION		4293-4441'
Surface:	WI-9			4480	GB/SA	8.625	24.00	1655	875	0	CIRC	12.25	
717' FNL & 651' FWL						5.5	15.50	4491	1250	0	CIRC	7.875	
Bottomhole:													
1303' FNL & 1339 FWL													
34-T18S-R38E	AMOCO	3637 GL	4/86	4380	OIL -	16	42.05	40	2.5 YD	0	CONSTR.	22	4126-4168'
721' FNL & 569' FWL	210			4370	GB/SA	10.75	40.50	1650	1200	0	CIRC	14.75	
						7	23.00	4380	1600	0	CIRC	9.875	
34-T18S-R38E	AMOCO	3637 GL	9/83	4444	INJ -	14	36.71	40	4 YD	0	CONSTRUCTION		4232-4406'
1950' FNL & 535' FWL	WI-6			4408	GB/SA	8.625	24.00	1640	1380	0	CIRC	12.25	
						5.5	15.50	4444	1800	0	CIRC	7.875	
34-T18S-R38E	AMOCO	3642 DF	8/32	4180	OIL	16	70.00	236	100	124	CALC	19.75	3970-4180'
1980' FNL & 660' FWL	2 /old 29		8/78	4220	GB/SA	10.75	45.50	2776	400	618	CALC	12.25	
			8/82	4256		8.625	36.00	3970	150	0	CIRC	9.5 *	
						5.5	14.00	4220	155	3919	CIRC	7.875 *	
						(LINER - TOL @ 3919)							
34-T18S-R38E	AMOCO		8/34	3976	OIL	16	70.00	224	90	130	CALC	19.75	4080-4246'
660' FNL & 660' FWL	1 /old 8		3/48	4221	GB/SA	10.75	40.00	1647	350	0	CALC	12.25	
			10/78	4246		7	24.00	3976	1450	0	CIRC	8.75 *	
						5.5	18.00	4221	50	3872	CIRC	6.25 *	
						(LINER - TOL @ 3872)							
27-T18S-R38E	R H KING	3640 *	1/48	4286	DRY	8.625	32.00	246	200	CIRC	CALC	12.25	PLUGGED
650' FSL & 5' FWL	SANGER #1					5.5	14.00	4069	350	2790	TS	7.875	
33-T18S-R38E	CHEVRON	3655 KB	10/83	7110	OIL	13.375	48.00	415	500	0	CIRC	17.5	6638-6642'
510' FNL & 660' FEL	GRIMES			6817		8.625	32.00	4289	1740	0	CIRC	12.25	
	STATE B 9					5.5	17.00	7109	1220	0	CIRC	7.875	

AOR TABULATION

N.M.O.C.D. ORDER NO. R-6199
FORM C-108, ITEM VI
JANUARY 1990

LOCATION S-T-R FOOTAGE	OPERATOR WELL #	ELEV.	DATE DRILLED	TD PBTD	WELL TYPE	CASING DETAIL SIZE	WEIGHT (LB/FT)	DEPTH (FT)	CEMENT (SACKS)	TOC (FT)	DTMND BY	HOLE SIZE	COMPLETION INTERVAL
27-T18S-R38E	SHELL	3641 DF	2/77	4360	INJ.	8.625	24.00	347	275	0	CALC	12.5 *	4161-4218'
1200' FNL & 470' FWL	SANGER #6			4218	GB/SA	5.5	15.50	4222	450	2626	CBL	7.875 *	
	(NHU 27-111W)												
27-T18S-R38E	SHELL	3636 KB	6/36	4250	OIL	12.5	50.00	270	150	0	CIRC	17.5	4180-4250'
2645' FSL & 412' FEL	SANGER #7			4250	GB/SA	9.625	36.00	1705	575	0	CALC	11.5 *	
	(NHU 27-121)					7	24.00	4108	275	3200	CBL	8.75 *	
27-T18S-R38E	SHELL	3638 KB	6/35	4252	OIL	12.5	50.00	259	150	0	CIRC	16.5	4075-4252'
1650' FSL & 412' FWL	SANGER #3			4252	GB/SA	9.625	40.60	1645	200	735	CALC	11.5 *	
	(NHU 27-131)					7	29.00	4075	250	3330	CBL	8.75 *	
27-T18S-R38E	SHELL	3644 KB	10/34	4257	OIL	12.5	50.00	275	250	0	CIRC	18	4032-4257'
330' FSL & 287' FWL	SANGER #1			4257	GB/SA	9.625	36.00	1648	363	50	CALC	11.5 *	
	(NHU 27-141)					7	24.00	4060	250	3225	CALC	8.75 *	
						5.5	15.50	4225	100	3150	CBL	6.25 *	
27-T18S-R38E													
1350 FSL & 1350' FWL	SHELL	3640 KB	7/37	4375	OIL	13	45.00	274	150	0	CIRC	17.5	4086-4375'
	SANGER #5			4375	GB/SA	9.625	36.00	1718	450	0	CALC	12	
	(NHU 27-231)					7	34.00	4086	250	3225	CBL	8.75	
27-T18S-R38E	SHELL	3643 DF	2/35	4350	OIL	12.5	50.00	233	700	0	CIRC	15	4060-4350'
330 FSL & 1325' FWL	SANGER #2			4345	GB/SA	9.625	44.00	1648	350	0	CIRC	11	
	(NHU 27-241)					7	24.00	4060	250	3145	CBL	8.625	
28-T18S-R38E	SHELL	3650 DF	5/85	4428	INJ	9.625	36.00	1510	650	0	CIRC	12.25	4120-4270'
Surface:	NHU 33-312			4381	GB/SA	7	20.00	4428	975	0	CIRC	8.75	(MD)
151' FNL & 1702' FEL													
Bottomhole:													
69' FNL & 1312' FEL													
28-T18S-R38E	SAMEDAN	3648 GL	5/35	4262	OIL	12.5	50.00	235	150	0	CIRC	16	4020-4238'
2310' FNL & 1120' FEL	MOON B #1			4238	GB/SA	7	23.00	4020	500	2677	CBL	8.75 *	
	(NHU 28-421)												
28-T18S-R38E	SHELL	3649 KB	6/81	4510	INJ	8.625	24.00	1600	850	0	CIRC	12.25 *	4239-4270'
2199' FNL & 772' FEL	NHU 28-422W			4470	GB/SA	5.5	14.00	4503	1050	0	CIRC	7.875 *	

AOR TABULATION

N.M.O.C.D. ORDER NO. R-6199
FORM C-108, ITEM VI
JANUARY 1990

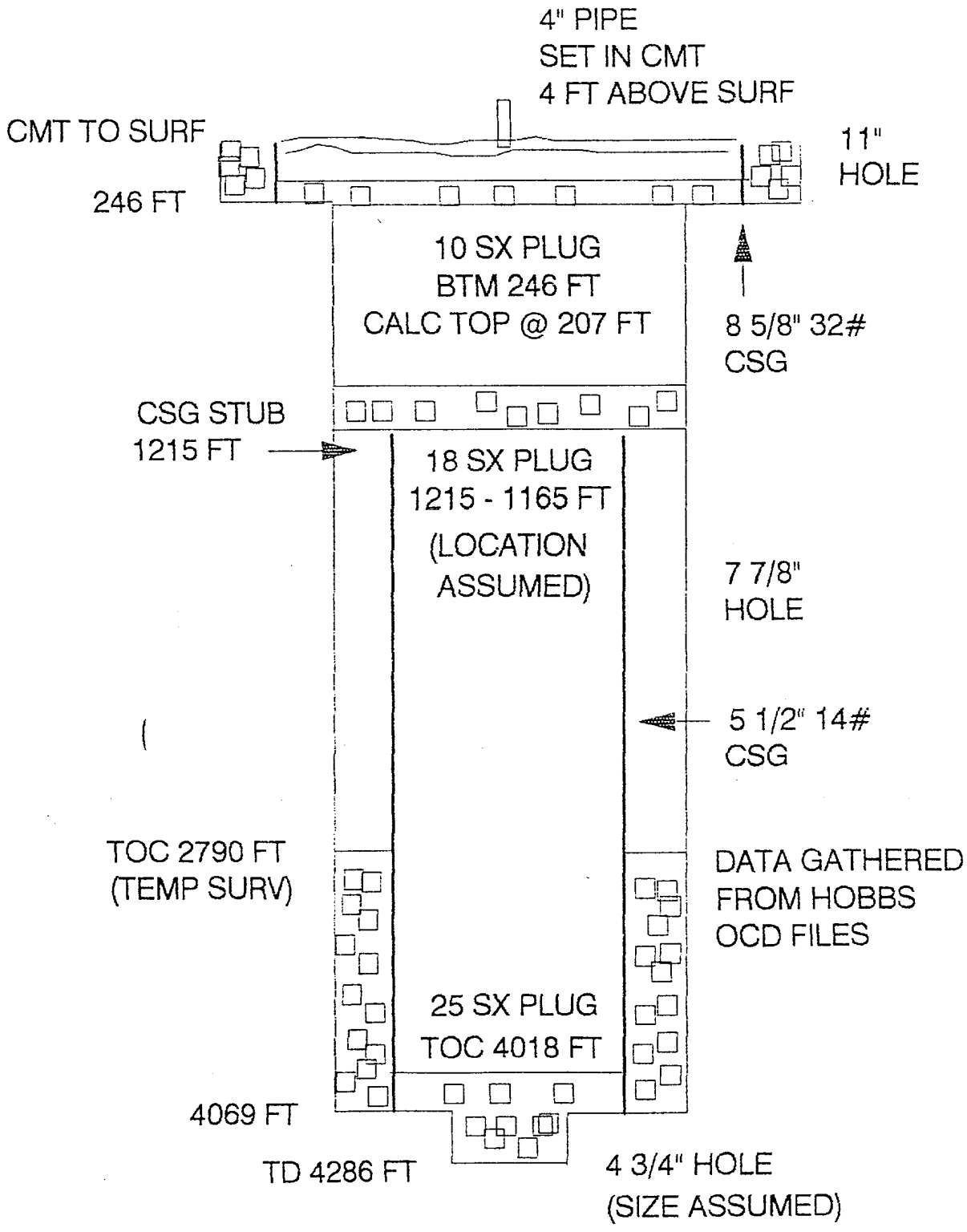
LOCATION S-T-R FOOTAGE	OPERATOR WELL #	ELEV.	DATE DRILLED	TD PBTD	WELL TYPE	CASING DETAIL SIZE	WEIGHT (LB/FT)	DEPTH (FT)	CEMENT (SACKS)	TOC (FT)	DTMND BY	HOLE SIZE	COMPLETION INTERVAL
28-T18S-R38E	CONTINENT	3648 GL	9/35	4225	OIL	10.75	40.00	225	150	0	CIRC	13.5 *	3993-4225'
1650' FSL & 990' FEL	GRIMES #4				GB/SA	7.625	26.40	1640	400	0	CIRC	9.625 *	
	(NHU 28-431)					5.5	17.00	3993	400	0	CIRC	7.875 *	
28-T18S-R38E	CONTINENT	3642 GL	1/35	4320	INJ	10.75	40.00	243	150	0	CIRC	13.5	4102-4257'
330 FSL & 660' FEL	GRIMES #2			4272	GB/SA	7.625	26.40	1634	300	185	CALC	9.625	
	(NHU 28-441W)					5.5	17.00	4015	300	1940	TS	6.25	
						4	11.30	4318	100	3801	CIRC	6.25	
						(LINER - TOL @ 3801)							
34-T18S-R38E	SKELLY	3642 KB	7/34	4276	OIL	12.5	50.00	240	175	0	CALC	16	4211-4276'
660 FSL & 1650' FWL	TURNER #2			4276	GB/SA	7	24.00	4012	400	1593	CALC	8.75	
	(NHU 34-211)					5	15.00	4211	340	0	CIRC	6.25	
34-T18S-R38E	GETTY	3638 KB	9/32	4222	OIL	12.5	50.00	220	200	0	CIRC	16 *	4083-4217'
1980' FNL & 1700' FWL	TURNER #1			4220	GB/SA	9	34.00	2780	400	0	SQZ	11.75 *	
	(NHU 34-221)					7	24.00	3974	300	1823	CALC	8.5 *	
						5	18.00	4221	340	3120	CBL	6.25 *	
34-T18S-R38E	SHELL	3641 GL	9/35	4254	OIL	12.5	50.00	282	150	0	CIRC	16	4134-4254'
1022' FNL & 2310' FEL	TURNER #2			4254	GB/SA	9.625	36.00	1700	625	0	CIRC	11.5 *	
	(NHU 34-311)					7	24.00	4134	300	3210	CBL	8.75 *	
34-T18S-R38E	GULF	3647 KB	11/34	4256	OIL	13.375	54.50	285	200	0	CALC	15	4095-4256
660' FNL & 660' FEL	GRIMES B #4			4256	GB/SA	9.625	36.00	2739	351	1723	CALC	12.25 *	
	(NHU 33-411)					7	24.00	3970	150	3260	CBL	8.75 *	
						5.5	14.00	4175	40	3964	TS	6.25	
						(LINER - TOL @ 3979)							

ABBREVIATIONS

* - ESTIMATED
CIRC - CIRCULATE
CBL - CEMENT BOND LOG
TS - TEMPERATURE SURVEY
SQZ - SQUEEZED CEMENT TO SURFACE
TOL - TOP OF LINER
GB - GRAYBURG
SA - SAN ANDRES
GL - GROUND LEVEL
DF - DERICK FLOOR
KB - KELLY BUSHING
MD - MEASURED DEPTH

FORM C-108

R. H. KING
SANGER #1



AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, George W. Moore

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

January 12, 1990
and ending with the issue dated

January 12, 1990

George W. Moore
Publisher.

Sworn and subscribed to before me this 16th day of January, 1990

Pamela W. Cole
Notary Public.

My Commission expires

July 12, 1993
(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.

56 **LEGAL NOTICE**
January 12, 1990

Notice is hereby given of the application of Shell Western E&P Inc., P.O. Box 576, Houston, TX 77001, to the Oil Conservation Division, New Mexico Energy & Minerals Department, for approval of the following injection wells for the purpose of pressure maintenance and enhanced recovery.

Well Nos: 27-221W and 27-241

Lease/Unit Name: North Hobbs (Grayburg/San Andres) Unit

Both locations are in Section 27, T18S, R38E, Lea County, New Mexico.

The NHU 27-241, 330' FSL & 1325' FWL, is a conversion to water injection service. The injection formation is the San Andres at a depth of approximately 4060 feet below the surface of the ground. Expected maximum injection rate is 2000 barrels of water per day, and expected maximum injection pressure is 812 psi. The NHU 27-221W, 2600' FNL & 544' FWL, will be drilled as a water injector. The injection formation is the San Andres at a depth of approximately 4150 feet below the surface of the ground. Expected maximum injection rate is 2000 barrels of water per day, and expected maximum injection pressure is 830 psi.

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 (15) days.