A Subsidiary of Shell Oil Company

P.O. Box 576 Houston, TX 77001

June 29, 1984

The State of New Mexico Energy and Minerals Department Oil Conservation Division ATTN: Mr. Joe D. Ramey P.O. Box 2088 Santa Fe, New Mexico 87501 Caso 8262

Gentlemen:

RE: APPLICATION FOR ORDER:

- (1) APPROVING 35 UNORTHODOX WELL LOCATIONS
- (2) APPROVING DIRECTIONAL DRILLING OF 3 WELLS AT UNORTHODOX WELL LOCATIONS, AND
- (3) EFFECTIVE AND EFFICIENT DRAINAGE FINDINGS FOR THE WELLS

IN THE HOBBS GRAYBURG-SAN ANDRES POOL LEA COUNTY, NEW MEXICO

Shell Western E&P Inc., as operator of the North Hobbs (Grayburg-San Andres) Unit, Lea County, New Mexico, proposes to drill, as infill wells, 38 unit wells, more particularly identified on Exhibits "A" and "B" attached hereto, at the locations described on Exhibits "A" and "B", Hobbs Grayburg-San Andres Pool, Lea County, New Mexico.

Shell Western E&P Inc. ("Shell Western") respectfully applies for an order approving this application as described more particularly below.

I. <u>Unorthodox Well Location</u>

Shell Western applies for an order allowing it to drill each of the wells identified on Exhibit "A" at the unorthodox well location described on Exhibit "A". The unorthodox well locations are necessary to complete on an efficient production and injection pattern within the North Hobbs Grayburg-San Andres Pressure Maintenance Project approved in Oil Conservation Commission Order No. R-6199.

II. <u>Directional Drilling at Unorthodox Well Locations</u>

Shell Western applies for an order allowing it to directionally drill each of the wells identified on Exhibit B and to drill

each well at the unorthodox surface location and unorthodox bottom hole location described in Exhibit "B". The unorthodox locations are necessary to complete an efficient production and injection pattern within the North Hobbs Grayburg-San Andres Pressure Maintenance Project. Directional drilling is necessitated by surface obstructions.

III. Effective and Efficient Finding

Shell Western applies for an order finding that each well listed on Exhibits "A" and "B" is necessary to effectively and efficiently drain a portion of the North Hobbs Grayburg-San Andres Pool covered by the existing proration unit, into which the well will be drilled, which cannot be so drained by any existing well within the proration unit.

Therefore, Shell Western requests that this application be set for hearing before an examiner on the July 11, 1984, docket.

Oral application for the relief sought herein was made 22 days prior to July 11, 1984, in accordance with Rule 1203 of the Division Rules and Regulations. Amoco Production Company (USA), Moranco, and Phillips Petroleum Co. have been notified by certified mail, return receipt requested, of this application.

Respectfully submitted,

A. J. Fore

Supervisor Regulation and Permitting

Mid-Continent Division

Shell Western E&P Inc.

(713) 870-3787

a. Jour

MF/mwt

Enclosures

cc: w/enclosures
Amoco Production Company (USA)
P.O. Box 3092
Houston, Texas 77253

Moranco P.O. Box 1860 Hobbs, New Mexico 88240

Phillips Petroleum Co. ATTN: Laws and Regulations 336 H.S. & L. Building Bartlesville, Oklahoma 74004 EXHIBIT A

NORTH HOBBS (GRAYBURG-SAN ANDRES) UNIT HOBBS GRAYBURG-SAN ANDRES POOL LEA COUNTY, NEW MEXICO

Well No.]	Locat	ion		Sec.	TWP	RNG
13-342	1200'	FSL,	2500 '	FEL	13	18S	37E
13-442	1200'	FSL,	220'	FEL	13	18S	37E
24-312	10'	FNL,	2630'	FEL	24	18 S	37E
24-414	10'	FNL,	1280'	FEL	24	18S	37 E
19-212	1460'	FWL,	160'	FNL	19	18S	38E
24-432	1280'	FEL,	2480'	FSL	24	18S	37E
19-232	1390'	FWL,	2795'	FNL	19	18S	38E
20-132	180	FWL,	2490'	FSL	20	18S	38E
24-442	200'	FEL,	1260'	FSL	24	18S	37E
19-332	2535	FEL,	1430'	FSL	19	18S	38E
24-212	2620	FWL,	1280'	FNL	24	18S	37E
29-442	170'	FEL,	1230'	FSL	29	18S	38E
30-242	1400'	FWL,	200'	FSL	30	18S	38E
30-444	215	FSL,	1255'	FEL	30	18S	38E
32-312	1400'	FEL,	210'	FNL	32	18S	38E
32-422	110'	FEL,	1385'	FNL	32	18S	38E
33-212	1420'	FWL,	205'	FNL	33	18S	38E
31-422	2259'	FNL,	600'	FEL	31	18S	38E

Well No.	Locat	ion		Sec.	TWP	RNG
32-223	1410' FWL	2630'	FNL	32	18 <i>S</i>	38E
32-423	1280' FEL	2540'	FNL	32	18 <i>S</i>	38E
33-323	1420' FEL	2495'	FNL	33	18S	38E
32-143	300' FWL	1185'	FSL	32	18S	38E
32-332	2350' FEL	, 1550'	FSL	32	185	38E
33-242	2530' FWL	1280'	FSL	33	185	38E
19-442	380' FEL	1100	FSL	19	185	38E
24-342	145' FSL	1435'	FEL	24	185	37E
30-112	200' FNL	, 1310'	FWL	30	185	38E
30-113	1310' FNL	, 195 '	FWL	30	18S	38E
29-322	2350' FEL	1430'	FNL	29	18S	38E
28-122	200' FWL	, 1592 '	FNL	28	18S	38E
30-233	1480' FWL	2455'	FSL	30	18S	38E
30-332	1600' FEL	, 2470'	FSL	30	18S	38E
30-432	180' FEL	2260'	FSL	30	18S	38E
29-323	2500' FEL	, 2540 '	FNL	29	185	38E
29-122	180' FWL	1600'	FNL	29	18S	38E

EXHIBIT B

NORTH HOBBS (GRAYBURG-SAN ANDRES) UNIT HOBBS GRAYBURG-SAN ANDRES POOL LEA COUNTY, NEW MEXICO

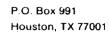
Well No.	Location	Sec.	TWP	RNG
28-242	Suf 2014' FWL, 1163' FSL Bhl 2400' FWL, 1100' FSL	28	185	38E
33-312	Suf 1702' FEL, 136' FNL Bhl 1330' FEL, 10' FNL	33	185	38E
30-312	Suf 500' FNL, 1448' FEL Bhl 20' FNL, 1268' FEL	30	185	38E

Shell Western E&P Inc.

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A Subsidiary of Shell Oil Company

August 1, 1984



City of Hobbs ATTN Russ Doss, City Engineer 300 North Turner Hobbs, NM 88240

CASE #8263

Dear Sir:

SUBJECT: PROPOSED INFILL PRODUCERS

SHELL - NORTH HOBBS (G/SA) UNIT

HOBBS (G/SA) FIELD LEA COUNTY, NEW MEXICO

This is to advise you that Shell Western E&P Inc. (SWEPI) proposes to drill 43 infill wells within the SWEPI operated North Hobbs (G/SA) Unit in the Hobbs Field. The well numbers and their locations are shown on the attached page. Seventeen of the proposed wells, indicated with an asterisk, will be located within the City of Hobbs. In addition, one existing well within the city limits will be converted to water injection.

We are requesting your permission to conduct our drilling program within the city limits. With your approval, operations are expected to begin September 15, 1984 and should be completed by June 1, 1984.

SWEPI, of course, will make the necessary arrangements to notify residents in the immediate area prior to starting operations. For your information, we have attached a recent areal photograph with an overlay showing the proposed locations of the wells.

Should you require further information, please advise.

Yours very truly,

A. J. Fore

Supervisor Regulatory and Permitting

Mid-Continent Division

TJV: AD

Attachments

cc:√State of New Mexico Energy and Minerals Department Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

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

BNBH8420903

bc: Mid-Continent Division

Division Production Administration Manager
Division Production Superintendent - Central
Manager Production Engineering
Team Leader-North Hobbs (G/SA) Team
Production Foreman-New Mexico Production Unit
Drilling Superintendent - A. D. Miller
Land, Houston - Rick Goenner
Land, Midland - Bill Kouns

SHELL WESTERN E&P INC. ET AL NORTH HOBBS (G/SA) UNIT PROPOSED LOCATIONS NEWLY DRILLED WELLS LEA COUNTY, NEW MEXICO

TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM

SECTIO	N UNIT WELL NO.	UNIT LETTER	PROPOSED LOCATION
13	342	0	1200' FSL, 2500' FEL
13	442	Р	1200' FSL, 220' FEL
24	312	В	10' FNL, 2630' FEL
24	414	А	10' FNL, 1280' FEL
24	432	I	1280' FEL, 2480' FSL
24	442	Р	200' FEL, 1260' FSL
24	212	С	2620' FWL, 1280' FNL
24	342	0	145' FSL, 1435' FEL
	TOWNSHIP 18	SOUTH, RANGE 38 EA	AST, NMPM
19	TOWNSHIP 18	SOUTH, RANGE 38 EA	AST, NMPM 1460' FWL, 160' FNL
19 19			
	212	С	1460' FWL, 160' FNL
19	212 232	С К	1460' FWL, 160' FNL 1390' FWL, 2501' FSL
19 20	212 232 132	С К L	1460' FWL, 160' FNL 1390' FWL, 2501' FSL 180' FWL, 2490' FSL
19 20 19	212 232 132 332	C K L J	1460' FWL, 160' FNL 1390' FWL, 2501' FSL 180' FWL, 2490' FSL 2535' FEL, 1430' FSL
19 20 19 *29	212 232 132 332 442	С К L J Р	1460' FWL, 160' FNL 1390' FWL, 2501' FSL 180' FWL, 2490' FSL 2535' FEL, 1430' FSL 170' FEL, 1230' FSL

TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM

SECTION	UNIT WELL NO.	UNIT LETTER	PROPOSED LOCATION
*32	422	Н	110' FEL, 1385' FNL
*33	213	С	2455' FWL, 1300' FNL
31	422	н	2259' FNL, 600' FEL
32	223	F	1410' FWL, 2630' FNL
*32	423	Н	1280' FEL, 2540' FNL
*33	232	G	1453' FEL, 2525' FNL
*32	143	М	300' FWL, 1185' FSL
*32	332	J	2350' FEL, 1550' FSL
*33	242	N	2530' FWL, 1280' FSL
19	442	Р	380' FEL, 1100' FSL
30	112	D	200' FNL, 1310' FWL
30	113	D	1310' FNL, 195' FWL
*29	322	G	2350' FEL, 1430' FNL
*28	122	E	211' FWL, 1579' FNL
30	233	K	1480' FWL, 2455' FSL
30	332	J	1600' FEL, 2470' FSL
30	432	I	180' FEL, 2260' FSL
*29	323	G	2500' FEL, 2540' FNL
29	122	Ε	180' FWL, 1600' FNL
*28	242	N Surf BHL	2014' FWL, 1163' FSL 2400' FWL, 1100' FSL
*33	312	B Surf BHL	1702' FEL, 136' FNL 1330' FEL, 10' FNL

SECTION	UNIT WELL NO.	UNIT LETTER	PROPOSED LOCATION
30	312	B Sur BHL	
*28	232W ,	K	2300' FSL, 1350' FWL
*29	342W	0	1230' FSL, 2500' FEL
30	333W	J	1400' FSL, 2430' FEL
30	443W	P	1300' FSL, 160' FEL
*33	212W	С	205' FNL, 1420' FWL

Existing Well - Convert to Injection

*33 221 F 2310' FNL, 1320' FWL