

A Subsidiary of Sheil Oil Company

P.O. Box 576 Houston, TX 77001

April 6, 1989

State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division 310 Old Santa Fe Trail, Room 206 Santa Fe, NM 87503

#### Gentlemen:

SUBJECT: EXPANSION OF WATERFLOOD PROJECT

SHELL - NORTHEAST DRINKARD UNIT

NORTH EUNICE BLINEBRY-TUBB-DRINKARD OIL & GAS POOL WELL NO. 322-S (CURRENT NAME: STATE SEC. 2 NO. 6)

SECTION 2, T21S, R37E LEA COUNTY, NEW MEXICO

Shell Western E&P Inc. (SWEPI) respectfully requests administrative approval for expansion of the subject waterflood project. Division Order No. R-8541 granted November 9, 1987, authorized SWEPI to conduct the Northeast Drinkard Unit Waterflood Project within the subject pool.

The "First Supplement - 1989" to the "Initial Plan of Operation" for the Northeast Drinkard Unit, submitted to the NMOCD on March 16, 1989, indicates our intent to donate the State Section 2 No. 6 as a replacement for the NEDU No. 315 due to the presence of an "irrecoverable" fish across the lower Tubb and Drinkard in No. 315. The State 2-6 will be utilized as a Blinebry/Tubb/Drinkard injector, and will be renamed the NEDU No. 322 upon its recompletion from the Wantz Abo Pool.

The following information is submitted in support of this request:

- 1. Plat of Unit identifying proposed injector and its project area.
- 2. Injection Well Data Sheet (with miscellaneous data attached).
- An Affidavit of Publication certifying the newspaper legal notice.
- 4. List of offset operators and surface owner.
- 5. All entities in Item Four have been notified by certified mail.

If additional information is required, please advise.

Yours very truly,

CEN EMILY

W.F.N. Kelldorf

Staff Production Engineer

Safety, Environmental and Administration

Western Division

JMW:SJK

Attachments

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

State of New Mexico Office of Land Commissioner P. O. Box 1148 Santa Fe, NM 87504-1148

#### OIL CONSERVATION DIVISION

POST OFFICE BOX 2018
STATE LAND OFFICE BUILDING
BANTA FE, NEW MEXICO 87501

FORM C-108 Revised 7-1-81

APPL	ICATION	FOR	AHTHORI	TATION	TO 1	INDEPT

I.	Purpose: Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? Xyes no			
11.	Operator: SHELL WESTERN E&P INC.			
•	Address: P. O. BOX 576, HOUSTON, TX 77001 (WCK 4435)			
	Contact party: J. M. WINDER Phone: (713) 870-3797			
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? $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$			
٧.	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:			
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and</li> <li>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.).</li> </ol>			
VIII.	Attach appropriate geological data on the injection zone including appropriate lithological 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.			
х.	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 correcto the best of my knowledge and belief.			
	Name: W. F. N. KELLDORF Title STAFF PRODUCTION ENGINEER			
	Signature: Date: APRIL 6, 1989			
mdua	he information required ender Sections VI, VIII, X, and XI above has been previously itted, it need not be duplicated and resubmitted. Please show the date and circumstance he earlier submittal.  HEARING SEPTEMBER 24, 1987			

#### 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.

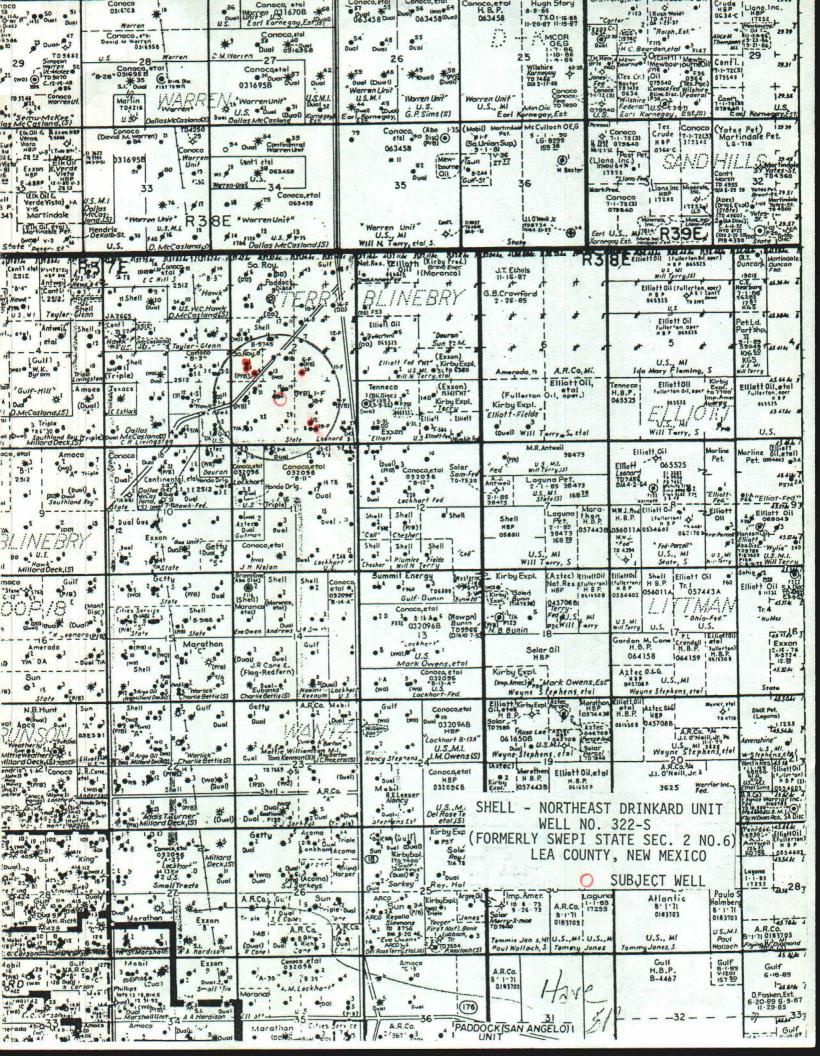
- 8. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
  - (1) The name of the injection formation 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.



OFTRAT	OR .		LEASE	(FORMERLY SWEPI'S)
	SWEPT	Norn	HEAST DRINKARD ! INIT	STATE SEC. 2 No. 6)  TOWNSHIP RANGE
MIFFY	(O. FOC			TOWNSHIP RANGE.
3221	<u>N</u>	1980' FSL 6	1980 FWL 2	<u>2 - 21s -37e</u>
	•			
	Schemotic		Tabula	r Data
	11   1   1	11	Surface Casing	·
		133 @ 225'		Constitution 200
		- 108 @ 225	3176	Cemented with 300 sx.
			TOC SFC feet	determined by CIRC.
٠.			Hole size 17-1/2	<u>4</u>
		52" LINER TIED	Intermediate Casing	
	<b>F</b>	BACK TO ELS 10/8	. Intermediate Casing	·
:		85° @ 3149'		Cemented with 2000 sx.
		_ OB € 2140	TOC SFC Feet	determined by <u>CIRC.</u>
			Hole size 11"	
•	1.			
			Long string *	
		,	Size	Cemented with <u>1530</u> sx.
			TOCSECSec	determined by CIRC
ů.			Hole size	
•	=	BLINEBRY	<del></del>	<del></del>
		DINEBRI	Total depth 8207' (	<u>(SG TO 8065')</u>
		TUBB	Injection interval	
	-			+ / - 030'
•		DRINKARD	±5820' feet to (perforated or open-hole,	indicate which)
		<u>†</u>		<i>,</i>
		۸_	X: ORIGINALLY RUN	AS A LINER IN 7/51.
	4,41	ABO (TO BE SQZ'O)	EBOM 30401	8065' (CMT'D "/ 1080 SX
	X/ /X			
	4 4 5 4 1	HARE		s). In 10/86 IT WAS . 151
	A . A . A	= $(SQZ'D)$	THEO BACK TO	SURFACE (CHT'D W/ 450 SK
•			TOC AT SURFACE	
	4	→ 5½" e 8005	TEC AT SUGAR	JE).
	}	ELLEN		
	}	(O'NAGA)		
	TD-820			
	10-645	1		-
•			·	
		23/2"	FIRESTE	ee Frank :
·Tubin	g size	<u> 2/8</u> lii	ned with FIBERULA'	SS EPOXY set in a
	Guibe	RSON UNI-I	packer at _	± 5750 feet
	(brand a	and model)		
(or d	lescribe any	y other casing-tub	ing seal).	
Other	Data	•		10
1. 1	lame of the	injection formati	on BLINEBRY TUR	3B/DRINKARD
2. 1	Name of Fie	ld or Pool (if app	licable) N. EUNICE B/	TD OIL & GAS POOL
· ·				
			rinjection? /// Yes ////	
:	If no, for		he well originally drilled?	
		FUENBURGE	B OIL HEADUCES	
4.	Has the wel	l ever been perforugging detail (sac	ated in any other zone(s)? iks of cement or bridge plug(:	ist all such perforated intervals s) used)
	• -	_		EX PRIOR TO BITID THIERTON
• •				· · · · · · · · · · · · · · · · · · ·
	HARE:	1000-1004, S	COKD TO TOSK IN /BI	ELLEN: 8005-8207, ABAN'D W CIBP AT 80001, 10/86
. 5.	Give the de	opth to and name of	any overlying and/or underl	ying ail or gas zones (pools), in
	POTO RECO.			
	•			

## ATTACHMENT TO FORM C-108 NORTHEAST DRINKARD UNIT #322-S MISCELLANEOUS DATA

#### III. WELL DATA

B.(5) next higher oil zone - Paddock @ 5359' next lower oil zone - Abo @ 6835'

#### VII. PROPOSED OPERATION

1.	Average	Injection	Rate	1350	BWPD
	Maximum	Injection	Rate	2000	BWPD

- 2. Closed Injection System
- 3. Average Injection Pressure Maximum Injection Pressure Approximately 1200 psi (will not exceed 0.2 psi/ft. to top perforation)
- Source water San Andres, Analysis attached

#### IX. STIMULATION PROGRAM

Acid treatment schedule will be determined following evaluation of GR/CNL/CCL (to be run prior to perforating the unitized interval).

Ca Co: 0.49 Ca Son N

# SHELL WESTERN E&P INC. WATER ANALYSIS REPORT

#### WESTERN DIVISION

#### SAMPLE DESCRIPTION

COMPANY Shell Western EAP, Inc.		LABORATORY METE	in Water Labs., Inc.
FIELD		LABORATORY NUMBER .	387246
LEASE CDU		DATE SAMPLE TAKEN	3-17-87
WELL NUMBER		DATE SAMPLE RECEIVED.	3-26-87
COUNTY & STATE		DATE SAMPLE REPORTED	3-30-87
PRODUCING FORMATION San Andres			
WHERE SAMPLED Water Supply Hell #200	)		
SEMARKS			
CHEMICAL AND PHYSICAL PROPERTIES			
TOTAL HARDNESS Mg/L AS Ca CC3	_	TOTAL ALKALINITY Mg/L	AS C: CO3
CONSTITUENT	M¢'LITER	REACT, COEF.	MeQ/LITER
SODIUM TINCL POTASSIUM! AS NE 4	10,057	0.04350	437.3
CALCIUM - Ca++	1,000	0.04990	49.9
MAGNESIUM Mg + +	334	0.08224	27.5
IRON TOTAL - Fe++ & Fe+++	2.9	0.03581	0.1
BARIUM - Ba++		0.01460	
POSITIVE SUB-TOTAL	11,394		514.8
CHLORIDE - CI -	14,914	0.02220	420.6
- 500H & - SCCK- STANDBRADIE & STEWERACK	927	0.01639 *	15,2
SULFATE - SO4=	2,027	0.02032	42.2
HYDROXYL - OK -	0	0.05830	0.0
SULFIDE - S -	589	0.06238	36.8
	10 45		
NEGATIVE SUBTOTAL	18,457	•	514.8
TOTAL DISSOLVED SOLIDS	29,851		1,029.6
· BICARBONATE			
SPECIFIC GRAVITY 1.0222 @ 60 of	рн <u>6.74</u>	RES 0.270 & 3	80_ هو
	F		ALYST -
REACTION VALUE = (MILLIGRAMS/LITER) X (F	REACTION COEFFICIE	- 10 1 1	LUESTED BY
REACTION COEFFICIENT * VALENCE + MOLEC	ULAR WEIGHT.	Mr. Donnie	Anderson, Hobbs
Ne - B 7 6 5 4 3 2	1 0 1	2 3 4 5	6 7 8 Ci- 1000
Ce + 7	++++	+	HC03-
100			504 100
00 1 1 1 1			CO3

# SHELL WESTERN E&P INC. WATER ANALYSIS REPORT MID-CONTINENT DIVISION

COMPANY SWEPI		LABORATORY	
FIELD	~	LABORATORY NUMB	
LEASE TURNER		DATE SAMPLE TAKE	
WELL NUMBER 2		DATE SAMPLE RECE	
COUNTY & STATE LEA. NEW MEXICO		DATE SAMPLE REPORTED 4/9	
PRODUCING FORMATIONBLINEBERRY			
WHERE SAMPLED	····	<del></del>	
REMARKS			
CHEMICAL AND PHYSICAL PROPERTIES			
TOTAL HARDNESS Marl AS C. CO3 30500	<del>-</del>	TOTAL ALKALINITY	Mg/L AS C. CO3
CONSTITUENT	MULITER	REACT, COEF.	Meq/LITER
SODIUM (INCL. POTASSIUM) AS NE+	46995	0,04350	
CALCIUM - Cs - +	7400	0.04990	
MAGNESIUM - Mg + +	2916	0.08224	
IRON TOTAL - Fo + + & Ft + +	44	0.03581	
BARIUM - Bs + +	0	0.01480	<del> </del>
POSITIVE SUB-TOTAL	57355		
CHLORIDE - CI -	93035	0.02820	
CARBONATE & BIGARBONATE - CO3 - & HCO3 -	246	0.01639 *	
SULFATE - SOA-	1262	0.02082	
HYDROXYL - OH -	00	0.05830	
SULFIDE - S =	0	0,05238	
NEGATIVE SUB-TOTAL	94543		
TOTAL DISSOLVED SOLIDS	151898		
* BICARBONATE			
SPECIFIC GRAVITY 1.1068 5 60 of	PH 6.33	RES 669 @	<u>80</u> of
			ANALYST
		0151171	REQUESTED BY
REACTION VALUE = (MILLIGRAMS/LITER) × (	REACTION COEFFIC	SIENIT	
REACTION COEFFICIENT = VALENCE + MOLEC	REACTION COEFFIC CULAR WEIGHT.		5 <b>8</b> 7 <b>8</b> CI
REACTION COEFFICIENT * VALENCE + MOLEC	CULAR WEIGHT.	2 3 4	5 8 7 B CI-
REACTION COEFFICIENT * VALENCE + MOLEC Na + 8 7 8 5 4 3 2 1000 Ca + +	CULAR WEIGHT.		1000 HCC3-
REACTION COEFFICIENT * VALENCE + MOLEC Na+ 8 7 8 5 4 3 2	CULAR WEIGHT.		1000

SILLEST

SHELL WESTERN E&P INC.
WATER ANALYSIS REPORT
WESTERN DIVISION

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#### SAMPLE DESCRIPTION

COMPANY Shell Western E&P, Inc.  FIELD Drinkard  LEASE Argo  WELL NUMBER #5		LABORATORY NUMBER	in Water Labs., Inc. 38790
LEASE Argo		· · · · · · · · · · · · · · · · · · ·	
#5		DATE SAMPLE TAKEN	
WELL MINUSER		DATE SAMPLE RECEIVED.	3-12-87
COUNTY & STATE Les, NY		DATE SAMPLE REPORTED	
PRODUCING FORMATION	·		
WHERE SAMPLED			
REMARKS			
CHEMICAL AND PHYSICAL PROPERTIES			
TOTAL HARDNESS Mg/L AS C. CO3		TOTAL ALKALINITY Mg/L	AS Ca CO3 90
CONSTITUENT	Mg/LITER	REACT, COEF.	Meg/LITER
SODIUM (INCL. POTASSIUM) AS No+	6,152	0.04350	267.4
CALCIUM - Ca++	1,640	0,04990	81.8
MAGNESIUM - Mg + +	401	0.08224	33.0
IRON TOTAL - Fe++& Fe+++	255	0.03521	9.2
EARIUM - BE++	0	0.01450	0.0
POSITIVE SUB-TOTAL	8,448		391.4
CHLORIDE - CI -	13,494	0.02820	380.5
SOMETHING BICARBONATE - YOU - & HOO3 -	110	0.01639 *	1.8
SULFATE - SO4-	438	0.02082	9.1
HYDROXYL - OH -	0	0.05880	0.0
SULFIDE - S .	0.0	0,05238	0.0
NEGATIVE SUBTOTAL	14,041		391.4
TOTAL DISSOLVED SOLIDS	22,490		782.8
	223-30	<del></del>	70210
* BICARBONATE  SPECIFIC GRAVITY 1.0181 \$ 60 of	pH_6.02	-	
DEACTION VILLE CONTROL CONTROL	<b></b>		ALYST
REACTION VALUE = [MILLIGRAMS/LITER] X REACTION COEFFICIENT = VALENCE + MOLE	(REACTION COEFFIC CULAR WEIGHT,		ie Anderson, Hobbs
Nz + E 7 6 5 4 3 2	1 0 1	2 3 4 5	6 7 8 01-
1000			1990
Co + +	1///		нсоз-
100			100
Mg - +			S04-
100			100
Fe + 1			603-

Ca 204 N

## SHELL WESTERN E&P INC. WATER ANALYSIS REPORT

#### WESTERN DIVISION

#### SAMPLE DESCRIPTION

COMPANY Shell Western E&P, Inc.		LABORATORY ME	rtin Water Labs., Inc.
Drinkard Drinkard		LABORATORY NUMBE	
LEASE Argo "A"		DATE SAMPLE TAKEN	
WELL NUMBER #3			ED 3-12-87
COUNTY & STATE LEE, NY.		DATE SAMPLE REPORT	7ED 3-16-87
PRODUCING FORMATION	- <del></del>		
WHERE SAMPLED		<del></del>	
REMARKS			
CHEMICAL AND PHYSICAL PROPERTIES  TOTAL HARDNESS MOLL AS C. CO3	<del></del>	TOTAL ALKALINITY N	Ag/L AS Da CO3
CONSTITUENT	MorLITER	REACT. COEF.	Meg/LiTER
SODIUM (INCL. POTASSIUM) AS NE-	26,603	0.04350	1,156.6
CALCIUM - Ca + +	6,920	0.04990	345.3
MAGNESIUM - Mg + +	1,434	0.08274	117.9
IRON TOTAL - Fe + + & Fe + + +	351	0.03581	12.6
BARIUM - Bs + +	0	0.01450	0.0
POSITIVE SUB-TOTAL	35,308		1,632.4
CHLORIDE - CI -	57,525	0.02820	1,522.2
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	129	0.01539	2.1
SULFATE - SD4=	390	0.02082	8.1
HYDROXYL - OH -	0	0.05820	0.0
SULFIDE - S =	0.0	0.06738	0.0
NEGATIVE SUBTOTAL	58,045		2,632.4
	·		
TOTAL DISSOLVED SOLIDS	93,353		3,264.8
* BICARBONATE  SPECIFIC GRAVITY 1.0651 @ 60 of	рн <u>5.9</u>	RES. 0.098 &	80 of
REACTION VALUE . (MILLIGRAMS/LITER) X	(BEACTION COFFEIG	IENTI	REQUESTED BY
REACTION COEFFICIENT = VALENCE - MOLE	CULAR WEIGHT.	Mr. Do	onnie Anderson, Hobbs
No. + 8 7 6 5 4 3 2	1 1	2 3 4	5 6 7 2 Ci- 1000
Ce++ 100			HCC3-
Mg			\$04
100	X III		163
Fe+++			003
190			100

### SHELL WESTERN E&P INC. WATER ANALYSIS REPORT

# Ca CO3 0.63 Ca SO4 10.22

SO4- -

CO3 - -

100

100

#### WESTERN DIVISION

#### SAMPLE DESCRIPTION

Mg + +

100 Fe + +

100

COMPANY Shell Western E&P, Inc.		LABORATORY Mar	tin Water Labs., Inc.
FIELD Drinkard	<del></del>	LABORATORY NUMBER	62720
LEASE Sarkey		DATE SAMPLE TAKEN	2 20 87
WELL NUMBER	<del></del>	DATE SAMPLE RECEIVED	1. 2. 27
COUNTY & STATE Lea. NM	<del></del>	DATE SAMPLE REPORTE	1. 9 . 97
PRODUCING FORMATION	<del></del>	Divide of will be rich office	· ·
WHERE SAMPLED			
REMARKS			
CHEMICAL AND PHYSICAL PROPERTIES			
TOTAL HARDNESS Mg/L AS Ca CO3 29,600	-	TOTAL ALKALINITY Mg	/L AS Ca CO3330
		.1	
CONSTITUENT	Mg/LITER	REACT, COEF.	Meq/LITER
SODIUM (INCL. POTASSIUM) AS Na +	25,607	0.04350	1,113.4
CALCIUM - Ca + +	8,680	0.04990	433.1
MAGNESIUM - Mg + +	1,920	0.08224	157.9
IRON TOTAL - Fe ++ & Fe ++ +	21.6	0.03581	0.8
BARIUM — Ba++	0	0.01460	0.0
	•		
POSITIVE SUB-TOTAL	36.228		1,705.2
CHLORIDE - CI -	58,946	0.02820	-1,662.3
CARBONATE & BICARBONATE - TOY = & HCO3 -	403	0.01639 *	6.6
SULFATE - SO4=	1,742	0.02082	36.3
HYDROXYL - OH -	0	0.05880	0.0
SULFIDE - S =	0.0	0.06238	0.0
	_		·
NEGATIVE SUB-TOTAL	61,090		1,705.2
TOTAL DISSOLVED SOLIDS	97,318		3,410.4
* BICARBONATE			
SPECIFIC GRAVITY 1.0770 @ 60 of	nH _6.49	RES 0.096 @	80 <sub>of</sub>
	p		ALYST
REACTION VALUE = (MILLIGRAMS/LITER) X	REACTION COEFFICI	ENT! RE	QUESTED BY
REACTION COEFFICIENT = VALENCE + MOLE	CULAR WEIGHT.	Mr. Don	nie Anderson, Hobbs
Na +	1 0 1	2 3 4 5	6 7 8 CI- 1000
1000			
Ca + + 100			HCO3-

#### AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

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
_
<u>One</u> weeks.
Beginning with the issue dated
<u>March 12</u> , 1989
and ending with the issue dated
<u>March 12</u> , 1989
Smell More
Publisher.
Sworn and subscribed to before
me this $13$ day of
March 1989
Vera Murphy
Notary Public.
My Commission expires
November 14 10 92

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.

(Seal)

HL LEGAL NOTICE

March 12, 1989

NOTICE is hereby given of the application of Shell Western E&P Inc., Attention: W.F.N. Kelldorf, Staff Production Engineer, P.O. Box 576, Houston, TX 77001, (713) 870-3426, to the Oil Conservation Division, New Mexico Energy, Minerals, and Natural Resources Department, for approval of the following injection well for the purpose of secondary recovery.

Pool Name: North

Pool Name: North Eunice Blinebry-Tubb-Drinkard Oil & Gas

Lease/Unit Name: Northeast Drinkard Unit Well No.: 322 (Formerly

Shell's State Sec. 2 No. 6)
Location: 1980' FSL and
1980' FWL Sec. 2, T21S,
R 37 E; N M P M, Le a
County, New Mexico

The injection formations are the Blinebry, Tubb and Drinkard at depths of approximately 5693', 6150' and 6582' respectively below the surface of the ground. Expected maximum injection rate is 2000 barrels per day, and expected maximum injection pressure is 1200 psi. Interested parties must file objections or requests for hearing with the Oil Conservation Division, 310 Old Santa Fe Trail, Room 206, Santa Fe, New Mexico 87504, within fifteen (15) days.

# SERVICE LIST SHELL - NORTHEAST DRINKARD UNIT WELL NO. 322-S EXPANSION OF WATERFLOOD PROJECT

#### OFFSET OPERATORS

Meridian Oil, Inc. 21 Desta Dr. Midland, TX 79705

Conoco Inc. Box 460 Hobbs, NM 88240-0460

Chevron USA Inc. P. 0. Box 670 Hobbs, NM 88240-0670

#### SURFACE OWNER

State of New Mexico Office of Land Commissioner P. O. Box 1148 Santa Fe, NM 87504-1148

70					
S Form 3811, July 1983 447-8	SENDER: Complete items 1, 2, 3 and 4.  Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.  1. Show to whom, date and address of delivery.  2. Restricted Delivery.  3. Article Addressed to:				
45	3. Article Addressed to:				
	Meridian Oil, Inc. 21 Desta Dr. - Midland, TX 79705				
	4. Type of Service:	Article Number			
	☐ Registered ☐ Insured ☐ COD ☐ Express Mail	P-495 091 421			
	Always obtain signature of addressee or agent and DATE DELIVERED.				
DOME	5. Signature – Add <b>ressee</b> X				
STIC	6. Signature – Agent X				
RETUI	7. Date of Delivery				
DOMESTIC RETURN RECEIPT	8. Addressee's Address (ONL	Y if requested and fee paid)			

PS Form 3811, July 1983 447-845	Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.  1.  Show to whom, date and address of delivery.		
4	2. Restricted Delivery.		
845	3. Article Addressed to: State of New Mexico Office of Land Commissioner P. O. Box 1148 Santa Fe, NM 87504-1148		
	4. Type of Service:	Article Number	
	☐ Registered ☐ Insured ☐ COD ☐ Express Mail	P-495 091 424	
,	Always obtain signature of addressee or agent and DATE DELIVERED.  5. Signature – Addressee X  6. Signature – Agent X		
DOM			
ESTIC			
RET	7. Date of Delivery		
RETURNA	8. Addressee's Address (ON)	Y if requested and fee paid)	

PS Form 3811, July 1983 447-845	Put your address in the "RET reverse side. Failure to do this being returned to you. The re you the name of the person delivery. For additional fees to available. Consult postmaster for service(s) requested.	URN TO" space on the swill prevent this card from turn receipt fee will provide elivered to and the date of the following services are	
983	1. X Show to whom, dass and address of dalivery.		
447-	2. Restricted Delivery.		
5	3. Article Addressed to: Chevron USA Inc. P. O. Box 670 Hobbs, NM 88240-0670		
	4. Type of Service:	Article Number	
	☐ Registered ☐ Insured ☐ COD ☐ Express Mail	P-495 091 423	
	Always obtain signature of addressee <u>or</u> agent and <u>DATE DELIVERED</u> .		
MOD	5. Signature Addressee X		
ESTIC	6. Signature – Agant X		
RETU	7. Date of Delivery		
DOMESTIC RETURN RECEIPT	8. Addressee's Address (ONL	Y if requested and fee paid)	



#### STATE OF NEW MEXICO

## ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE 4-11-89

GARREY CARRUTHERS
GOVERNOR

/ed

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

OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501	we
RE: Proposed:	
MC DHC	Herman APR is 3 1 49
NSL	The second secon
SWD	
WFX X	A second of the
Gentlemen:	
I have examined the application for the:	
Starte to Extlus It to los	No. Unit S-T-R
Operator Lease & Well	No. Unit S-T-R
and my recommendations are as follows:	
<u> </u>	
Yours very truly	
Englishor	
Jerry Sexton Supervisor, District l	
Supervisor, Discriber	