

Dome Petroleum Corp.

2900 DOME TOWER

1625 BROADWAY

DENVER, COLORADO 80202



April 29, 1983

New Mexico Oil Conservation Commission P.O. Box 2088 Sante Fe, New Mexico 87501 Cuse 7877

Attn: Gilbert Katana

Re: Salt Water Disposal
Snake Eyes Entrada Pool
San Juan County, New Mexico

Dear Mr. Katana:

Per your request, enclosed is a copy of the original application we submitted to simultaneously dispose of salt water into the Morrison and Entrada Formations in the Snake Eyes Field.

If you have any additional questions, please do not hesitate to contact me at (303) 620-3136.

Very truly yours,

DOME PETROLEUM CORP.

Robert S. Kelley

Robert S. Kelley

Senior Production Engineer

well tite c OIL CONSERVATION DIVISION 22, 1982 ANTA FE

Dome Petroleum Corp

2900 Dome Tower 1625 BROADWAY DENVER, COLORADO 80202

December

Mr. Joe D. Ramey Secretary Director New Mexico Oil Conservation Commission P.O. Box 2088 Santa Fe, NM 87501

Re:

Amendment for Salt Water Disposal at Snake Eyes, Entrada Pool

S20-T21N-R8W

San Juan County, NM

Gentlemen:

Attached for your administrative approval is a request to permit disposal of salt water in the Santa Fe 20#2 well into two zones. Your commission has previously approved the Santa Fe 20#2 for salt water disposal in the Morrison sand and later the Entrada sand as per order number SWD-188 and order number R-6220, respectively (see attached orders).

Current water disposal needs cannot be met by either of the above zones individually. However, it is probable concurrent injection into the Morrison and Entrada adequately meet Dome's SWD needs and reduce surface pressures.

Dome is hereby requesting permission to dispose of salt water down the Santa Fe 20#2 well, in the Morrison and Entrada zones, as shown in the attached proposed wellbore sketch.

It is Dome's understanding that the above request can be presented before the Secretary Directory for consideration since interested parties have had opportunity to voice objections to SWD in the Morrison and Entrada zones as required by New Mexico regulations when these matters were before your commission.

Yours very truly,

DOME PETROLEUM CORP.

Lubbie A. Jenkins

Sr. Reservoir Engineer

LAJ/vp

Attachments

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 6755 Order No. R-6220

APPLICATION OF DOME PETROLEUM CORPORATION FOR WATER DISPOSAL, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

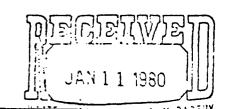
BY THE DIVISION:

This cause came on for hearing at 9 a.m. on December 12, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 9th day of January, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Dome Petroleum Corporation, is the owner and operator of the Santa Fe 20 Well No. 2, located in Unit F of Section 20, Township 21 North, Range 8 West, NMPM, Snake Eyes-Entrada Oil Pool, San Juan County, New Mexico.
- (3) That the applicant seeks authority to squeeze cement the previously authorized water disposal interval in the Morrison formation in the aforesaid well, and to dispose of produced water in the Entrada formation through the perforated interval from approximately 5756 feet to 5790 feet.
- (4) That the injection should be accomplished through 3 1/2-inch plastic lined tubing installed in a packer set at approximately 5200 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge or approved leak detection device should be attached to the



annulus in order to determine leakage in the casing, tubing, or packer.

- (5) That the injection well or system should be equipped with a pop-off valve or other acceptable device which will limit the wellhead pressure on the injection well to no more than 1155 psi.
- (6) That the operator should notify the supervisor of the Aztec district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.
- (7) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.
- (8) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Dome Petroleum Corporation, is hereby authorized to utilize its Santa Fe 20 Well No. 2, located in Unit F of Section 20, Township 21 North, Range 8 West, NMPM, Snake Eyes-Entrada Oil Pool, San Juan County, New Mexico, to dispose of produced water into the Entrada formation, injection to be accomplished through 3 1/2-inch tubing installed in a packer set at approximately 5200 feet, with injection into the perforated interval from approximately 5756 feet to 5790 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

- (2) That the injection well or system shall be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 1155 psi.
- (3) That the operator shall notify the supervisor of the Aztec district office of the Division of the date and time

				• •			• •	•				
******		į			*			(•		C-105	
A IEUTION		i		•					-		sed Harm	
A FE		i .				SERVATION				Sa. Indian	TIE Type of La	Fee X
 5.0.5.	1 1	WELL	COMPLE	,TION O	RREG	OMPLETY?	则邓	FRORTA	減D FOC!		Oil 6 Cas Les	
15.0.5. + NO OFF.CE	1 1	i			7		ET	W	Winds		5-22531	ise ive.
FERATOR	- 1 i	i			Page 1	III MAY I	a 2 '	1983	111	Tim	777777	m_{IIII}
			_	_	71	412	U ~-	1000	ا إل	4////	1111lli.	4/////
THE SEMELL					01	IL CONSERV	VATIO	ON DIVISI	i Vika	7. Uni: A	Greezent Nam	2777777
I	01L		EAS WELL		~~-			sposal M		1 _		
7785 0F 00-PUE	27104				DRY					E. Farm e	or Letse Name	ie .
	*****	,,,	#LUG [017	ESVR.	DTHCR	Cha	ange Zon	ies		a Fe 20	<u>.</u>
vame at Operator										9. Well 10		
THE PETROLEU!	M CORP.					- 			/		2	
							-	•		1	e end Pool, er	·•
01 Aircort Di	r Suite ?	<u>114. F</u>	<u>/armino</u>	ton. N	lew Mex	xico 87/	401			Snake 1	Eyes Ent	.rada
Esseuda di Pel					-	- -			• 1	VIIII.	4//////	1111111
£	2	> c0	•	N	*+h		*11	000 000	f	IIII.	<i>1]]]]]]</i> ;	.1/////
7 227760 <u>F</u>	LOCATES 44	150	FEET FA	100 THE [7	OPLII	LINE AND	***	180	FEET FROM !	TITITI.	7777777.	7777777,
	33			Ol			1]]).	1/////	<i>:1][[[]</i> :	12 Count	. (//	4/////
: Nest weder Dae Spubled	see. ZU	7WP.	21N ***	2. Bh		مرزلزلز	تكك	7/7/7/7		San Ju		Mim
	16. Dete 7.D. F	Aescheu	1						_	R. etc.,		
/22/77 . Tale: Eepia	6/1/77	uç Back "	1 2/8/80			le Compl., Ho		568' GF	R els , Roter	Tanks	6568*	
	****	-			. If Multiple Many	e Compan,	,	Drilled	d Sy .			10012
349 1 President leservel(s	: Lis compir			Name			ــــا		→ :0'-5	ンピピフ・		rectional Sun
	i), C	nu.	CF, we	, 146							Mode Mode	/Emilyson -
	• •										No	_•
<u>6401-58151 Ei</u> Type Electic cod 5	ntraoa									- 27	7. Was Well Co	
IL. Formation		riout p	~~ CB[\ני ^{ם נושג} יו∖	- Pav					1	No	_
it. Furmerzo	1 Delibert,	VEULL				port all string:	-< set	in well)				
CASING SIZE	WEIGHT LB.	/FT.	DEPTH			LE SIZE	1		HTING REC	ORD	AMC	DUNT PULLE
9 5/8"	36#	"	213			3½"	1	75 Sacks				one
7"	1 20# & 23	3#	5842'			8%"		200 Sacks		tage_		one
•	1 200	7"	1		 	<u> </u>	+-				<u> </u>	
	-		ı		+		1			,,,,		
	- ',	LINER R	≥ECORD		<u></u>		'	30.		TUE NE R	ECGEDE.	
SIZE	TOP		OTTOM	SACKS	CEMENT	SCREEN	N ,	SIZE			3 3 6 2 4	ACKER SET
		+	i	i		 	 ,	31/21		158.		1.5158'
		 		FRAM	IONS D	EP+-				MAR 7	n.l	1
Fedoration Record	(Interval, size ar	nd numbe	er)	-KEU	EIVED'	32.	ACI'	ID, SHOT, F			र्रे १०५ हे थे हैं . E	
	٠.		•		10	DEPTH	HINT	TERVAL	Ano	DUNKAND	KURHATES	
756'-5790';	.40: 2 sho'	ts/Ft	•	MAR	2 U 1A.	38 7561-5	750	,			%3HCI_	:.
		*			2.					7		
					2.91							
				DOME	E DENV							•
					PROD	DUCTION						
te Pust Production	Proc	Justion Me	·			ping - Size as	nd typ	pe pump)		IStari	ted Inje	
	<u>l</u>			roducti					NJ a	<u>IENTE</u>	aos 7/8/	80.
te of Test	Hows Tested	Chi	hoke Size	Prodin. Test P		Oil — Bbi.		Gas - MC		nter — 351.	Ges - OI	Oil Ratio
re Turns Fress.	Casing Pressu	re Ce	ciculated 24-	4- O11 - E	Bbi.	Cas -	MCF	w/	Vote: - Bbl.		Oil Gravity -	- AFI (Corr.)
	for f			,					17,	st Witness		
. Disposition di Cas	Isoid, uses jurge	sel, vente	ed, esc.j						1	st Witness.	≈ By	
												
. Liet et Attennents	*			•					1	•		
												 _
1. Senesy 2000, 9.20	a the into mations.	18th 47 00	in both sice	s of this	form is un	ne oud combin	cic w	s the best of	/my kunuse	der ond or	dief.	

CESTECT. DATE: 11.12R DISTORAGE

THE APPLICATION FOR A SALT WATER DISPOSAL

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION COMMISSION

Under the provisions of Rule 701 (C) Dome Petroleum Corporation made application to the New Mexico Oil Conservation Commission on July 18, 1977 for permission to complete for salt water disposal its Santa Fe and Pacific Railroad Well No. 2 located in Unit F of Section 20, Township 21 North, Range 8 West, NMPM, San Juan County, New Mexico.

The Secretary-Director finds:

- 1. That application has been duly filed under the provisions of Rule 701 (C) of the Commission Rules and Regulations;
- 2. That satisfactory information has been provided that all offset operators and surface owners have been duly notified; and
- 3. That the applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 (C) will be met.
- 4. That no objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, Dome Petroleum Corporation, is hereby authorized to complete its Santa Fe and Pacific Railroad Well No. 2 located in Unit F of Section 20, Township 21 North, Range 8 West, NMPM, San Juan County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the Morrison formation at approximately 5078 feet to approximately 5110 feet through 3½ inch plastic lined tubing set in a packer located at approximately 5040 feet.

IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface;

That the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer;

That injection pressures shall not exceed 1025 pounds per square inch as measured at the surface;

That the operator shall notify the supervisor of the Commission's Aztec District Office before injection is commenced through said well;

That the operator shall immediately notify the supervisor of the Commission's Aztec District Office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely or necessary to correct such failure or leakage.

PROVIDED FURTHER:

That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Commission may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operation in accordance with Rule 704 and 1120 of the Commission Rules and Regulations.

APPROVED at Santa Fe, New Mexico, on this 2nd day of August, 1977.

STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION

JOE D. RAMEY

Secretary-Director

SEAL

POLICE OCCUPA	10 16				AUG 2	4 19/9		Fo	rm C-105	
IST RIBUTION									vised it	
ANTA FE	171	NEW	אב צוכח ח	וו כטאי	DOME I SERVATION	DENVER	IQN 	Sa. In	ical- Ty	je of Leone
:LE	- 1/ - 	WELL COMPL			_			~l₀ ()(G 1	21+	Гее 🛚 Х
s.c.s.	1a1		- 110/10/1) STICE		5. Sta	ie Oil & (Gas Lease No.
AND OFFICE					in the			30-0	45-22	531
PERATOR	727	-			III MAY	02198	33		11111	TITITI
][[] "[A"	0 % 10 1	~ JIL			
TYPE OF WELL					OIL CONSE	PVATION	DIVISIO	7. Ur.	it Agreem	ent Name
	OIL	EA3	. 🗆			<u> Asirospal</u>		1		
TYPE OF COMPLE	WEL TION	.L #EL		D4 Y	STHER D		بديد.،،	8. i c	rn. or Lea	se Nume
HELL X		PLU6	017	Va.	OTHER			CANT	A FE	วก
NE e of Operator	tr Co Brist	*****	· <u></u>) — « ()		0146			S. We		<u> </u>
501C 500501		n						2		
DOME PETROLE	CORPORA	I'I ON							seld and	Fool, or Wildean
			•	••	07			CNIA	מעם מי	C ENIMENTS
501 Airport	Drive, Sui	te 107, Far	mington	, New	Mex. 87	401			77777	S ENTRADA
							•	. <i>[[[]</i>		
	2	150		0000	•	1000				
en Lettek <u>F</u>	LOCATED 2	150 PEET	FROM THE $\frac{N}{N}$	ORTE	LINE AND -	1980	- CEET	2000	77777	7777777777
						//////		11113 : - 5	•	
EWEST LINE OF				****		7111XI	77777		NAUL	
5. Dage Spudded	16. Date T.D. F	ieached 17. Date	Compl. (Re	edy to P	rod.) 18. E.	ievations (i	OF, RAB	R. RT. GR. esc	·기 19. 티	ev. Cashinghead
र्जे /22/7 7	06/0	1/77 0	8/06/79	INJEC	CTION 656	8' GR			6	5568
C. Total Depth	21. Plu	g Back T.D.		i ktultipie Jany	Compl., How			, hotery Tool		Cable Tools
5849	5	802	'	or contract of the contract of		. ==		0'-5849	•	
(. Producing Interval)	s), of this comple	tion - Top, Botto	m, Name							Was Directional Surv
			·							Mode
46871-52001	MORRISON		•						N	10 ·
E. Type Electric cost				7,"					27. Was	Well Cored
INDUCTION E		RMATTON DEN	SITY/NE	UTRON	. GAMMA F	AY/CEMI	NT BO	OND	N	10
F	330111207 10				ort all strings				·	
" CASING SIZE	WEIGHT LB.	1	H SET		ESIZE			G RECORD		AMOUNT PULLE
										NONE
9 5/8"	36≢		213		1/4"		75 sac			
· 7.	20# & 2	3# 38	342	8.	3/4"	121	JU Sat	cks 2 sta	96	NONE
-						···				<u></u>
					<u>i</u>	7			2.2500	
3.		INER RECORD			·	30.			G RECOF	וא
SIZE	ТОР	BOTTOM	SACKS C	EMENT	SCREEN		ZE	DEPTH S		PACKER SET
						3 1	/2"	475	6	4757
							1			
1. Performion Record			مهريا	, a	32.	ACID, SHO	T, FRAC	TURE, CEME	NT SOUR	EZE, ETC.
5078'-5116'		snots/it.	Marris		DEPTH	INTERVAL		AMOUNT A	ND KIND	MATERIAL USED
5030'-5038'			110	2	4796'-5	116'	ho	00 gal. 7	농용 HC	<u>l. Frackeď w</u>
4936'-4948'		_					42	,000# 20	-40 s	and.
4860'-4882' 4848'-4856'		и					1			
4796'-4804'		pt								
3.				PROD	UCTION					
ene First Production	Prod	uction Method (Fi	owing, gas i	ift, pump	ing - Size and	type hump	·)	We	II Status	(l'red. or Shut-in)
			NO	PRODU	CTION				SHUT	Ikm
ene of Test	· · · · · · · · · · · · · · · · · · ·	Choke Size	Prod'n.	For	Oil - Bhl.	Cus -	MCF	Water -18		Cas Oil Fano
	Hows Tested	1	Test Pe	botts		İ			100	
	Hows Tested	ì						/	7	7 (1 V)
iow Tubles Press		re Colculated	4- OII - B	bl.	Cox - M	(.T.F.	Litter	- 14bl - f	100.0	
iow Tubbo Press.	Casing Pressu	re Calculated :	24- OII - B	bl.	Cas - M	ICF	Water	- BPI .	011-0	initis 23/2) (Cour)
	Casing Pressu	How Rate	→ OII — B	ы.	Cas - k		Water		(1)	POLITY CON.
	Casing Pressu	How Rate	÷	ы.	Cas - k		Water	Ten With	(1)	TOTAL SAN (CON.)
C. Disposition of Gas	Casing Pressu	How Rate	→ OII — B	ы.	Cas - k	ICF	Water		(1)	64 64 64 64 64 64 64 64 64 64 64 64 64 6
C. Disposition of Gas	Casing Pressu	How Rate	24- OH − B	ы.	Cas - N		Water		(1)	The state of the s
C. Disposition of Gas	Casing Pressu (Sold, used for fu	el, vented, etc.)	<u>+ !</u>					Test With	- 1/0, - 1/0, - 1/0,	CALL STATE CONT.
iow Tubing Press. C. Disposition of Gas L. List of Attachment L. I hereby certify the	Casing Pressu (Sold, used for fu	el, vented, etc.)	<u>+ !</u>					Test With	- 1/0, - 1/0, - 1/0,	TO STATE OF THE PARTY OF THE PA

TITLE DRILLING FOREMAN

state law, where six majors are required. See Jose 1165.

Southeastern New Mexico

come is to be filled with the appropriate price Office of the Commission not later than 20 days after the completion of any newly-drilled or sent well, it shall be accompanied by our pay of all electrical and reduced tivity logs not plus well and a summary of all special tests concerned, including will now tests. All the the reported shall be re-assured depths, in the class of discionally drilled wells, true vertical depths shall the reported. For makingly considerious, from 36 through 34 shall be reported for each zone. The form is to be filled in quintuplicate except on

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Northwestern New Mexico

n Sali	Т.: Т	Strawn	T. Kirtland-Fruitle: T. Pictured Cliffs	nd	T. Penn. "D"
					T. Leadville
		Devonian			T. Madison
		Silurian		0151	T. Elbert
		Montova			T. McCracken
• ••		Simpson			T. Ignacio Quzte
		McKee		4376	T. Granite
		Ellenburger		1000	Т
		Gr. Wash	₩	4687	т
<u>-</u>		Granite		EE00	т
		Delaware Sand		5592	T
					T
			SANDS OR ZON		
io 1 from		_to			\$ 0
		•	·		•
io. 2, from	**************************************	.w	No. 5, 110000000000000000000000000000000000	•	
ia. 3, from		_toi	No. 6, from		
		IRPORTAR	T WATER SANDS		
	i water inflow a	od elevation to which water rose	in hole		
nclude data on rate o		•			
				•	AC
		to			<u> </u>
i. 1, from	· · · · · · · · · · · · · · · · · · ·	to		fcet	* *
ie. 2, from		to	•	fcct	
ic. 2, from		to	•	fcct	
ie. 2, from		to	•	fcet	
ic. 2, from		to	•	fcet	
io. 2, from		to	•	fcet	Formation

