

OIL CONSERVATION COMMISSION
Artes DISTRICT

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

Carl H. Harg

DATE July 26, 1977

RE: Proposed MC _____
Proposed DHC _____
Proposed NSL _____
Proposed SWD ✓ _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated 7-15-77
for the Dune Petroleum Corp Santa Fe 20 #2 F-20 214-8
Operator Lease and Well No. Unit, S-T-R

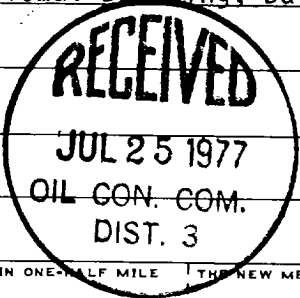
and my recommendations are as follows:

Approve

Yours very truly,

AR Hendrick

NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR Dome Petroleum Corp.		ADDRESS 1600 Broadway, Denver, CO 80202			
LEASE NAME Santa Fe and Pacific Railroad	WELL NO. 20-2	FIELD Snake Eyes Entrada	COUNTY San Juan		
LOCATION UNIT LETTER F ; WELL IS LOCATED 2150 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE, SECTION 20 TOWNSHIP 21N RANGE 8W NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	9-5/8"	213'	175	Circulated	Circulation
INTERMEDIATE					
LONG STRING	7"	5842'	1200	Circulated	Circulation
TUBING	3-1/2"	2860'	NAME, MODEL AND DEPTH OF TUBING PACKER Baker Model "FA"		
NAME OF PROPOSED INJECTION FORMATION Jurassic Morrison		TOP OF FORMATION 5078'		BOTTOM OF FORMATION 5110'	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES Perforations		PROPOSED INTERVAL(S) OF INJECTION 5078'-5110'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Entrada Production		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH None					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA None		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA Dakota 4640'		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA Entrada 5638'	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.)	MINIMUM 600	MAXIMUM 8000	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 800
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Yes			WATER TO BE DISPOSED OF Yes		
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Bureau of Indian Affairs Window Rock, Arizona			NATURAL WATER IN DISPOSAL ZONE Yes		
ARE WATER ANALYSES ATTACHED? Yes					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Southern Union Supply Company, Suite 1800, First International Building, Dallas, Texas 75270					
					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER Yes		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA Yes		THE NEW MEXICO STATE ENGINEER Yes	
		ELECTRICAL LOG Yes		DIAGRAMMATIC SKETCH OF WELL Yes	

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

W. E. Dabysak P.E.
(Signature)District Engineer
(Title)July 15, 1977
(Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.



E. C. GENT
VICE PRESIDENT

DOME PETROLEUM CORP.

SUITE 1500, COLORADO STATE BANK BLDG.
1600 BROADWAY
DENVER, COLORADO 80202

TELEPHONE
(303) 861-1230

July 14, 1977

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

Re: Application for Saltwater Disposal
Snake Eyes Entrada Pool
Section 20, T20N, R8W
San Juan County, New Mexico

Gentlemen:

Dome Petroleum Corp., the operator of the currently producing wells in the Snake Eyes Entrada Pool, under terms of Commission Rule 701 respectfully submits this application to dispose of saltwater by injection into a porous formation for administrative approval. In support of this application are the following required data:

1. A plat showing all wells and leases within a 2 mile radius of the proposed disposal well
2. The log of the Santa Fe 20-2 proposed injection well
3. A diagrammatic sketch of the Santa Fe 20-2 well which is proposed for saltwater disposal
4. A copy of a water analysis performed on the Santa Fe 20-1 well which is representative of the water to be injected into the Morrison Formation
5. A copy of Form C108 detailing significant well data, offset operations and information distribution

Per instructions, three copies of this application are submitted hereto. In addition, by copy of this letter the New Mexico State Engineer, the Navajo Tribe (surface owner) and the offset operators within 1/2 mile are being notified of this application.

Mr. Joe D. Ramey
New Mexico Oil Conservation Commission
July 14, 1977
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It is Dome's understanding that the Secretary-Director, upon receiving no objection, within 15 days of receipt of this application can give administrative approval. We hope this application is in order and very much appreciate your cooperation in this matter.

Yours very truly,

W. E. Babyak
W. E. Babyak
District Engineer

WEB:km
Enclosures

cc: Southern Union Supply Co.
First International Bldg.
Dallas, Texas 75270

Bureau of Indian Affairs
Windowrock, Arizona

New Mexico State Engineer
State Land Office Building
P. O. Box 2088
Santa Fe, New Mexico



CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS
WATER ANALYSIS

RECEIVED

MAR 25 1977

Minerals Management Inc.

File WA - 5

Company Dome Petroleum Corp. Well Name Sante Fe 20 No. 1 Sample No. SS-2
Formation _____ Depth _____ Sampled From _____
Location Sec 20 T 21N R 8W Field _____ County San Juan State N.M.
Date Sampled 3-9-77 Date Analyzed 3-13-77 Engineer RGC

Total Dissolved Solids 11,114.5 mg/L

Sp. Gr. 1.009 @ 70 °F.

Resistivity 1.0 ohm-meters @ 70 °F.

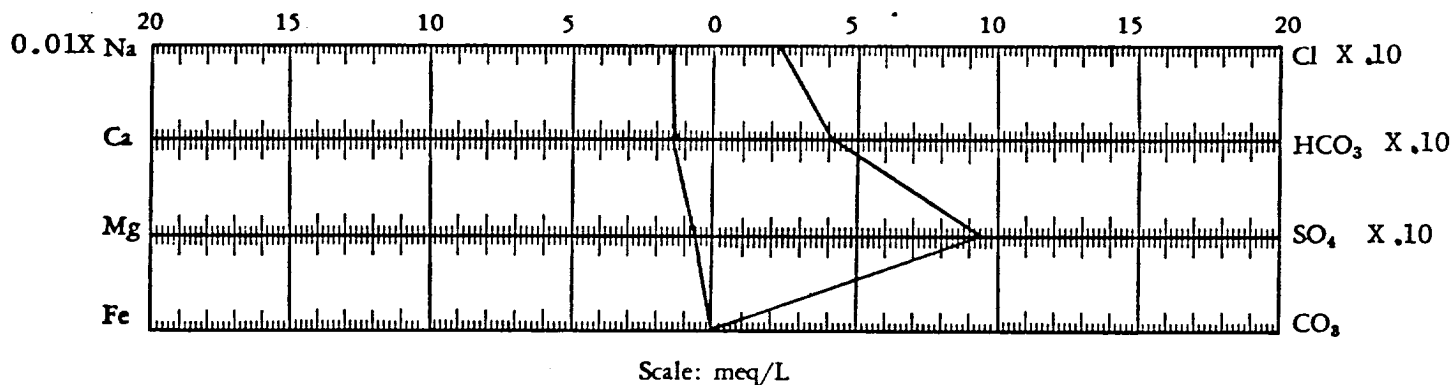
Hydrogen Sulfide Present

pH 7.73

Constituents	meq/L	mg/L
Sodium	<u>140.44</u>	<u>3228.7</u>
Calcium	<u>1.35</u>	<u>27.0</u>
Magnesium	<u>0.73</u>	<u>8.9</u>
Iron	<u>0.03</u>	<u>0.9</u>
Barium	<u>ND</u>	<u>ND</u>

Constituents	meq/L	mg/L
Chloride	<u>25.47</u>	<u>903.0</u>
Bicarbonate	<u>41.73</u>	<u>2546.0</u>
Sulfate	<u>91.61</u>	<u>4400.0</u>
Carbonate	<u>ND</u>	<u>ND*</u>
Hydroxide	<u>ND</u>	<u>ND</u>

*ND = Less than 0.1 mg/L



All analyses except iron determination performed on a filtered sample.

FIELD: SNARE LIES ENTRADA

WELL & NO.: SANTA FE 20-2

DATE SPUDDED: MAY 22, 1977

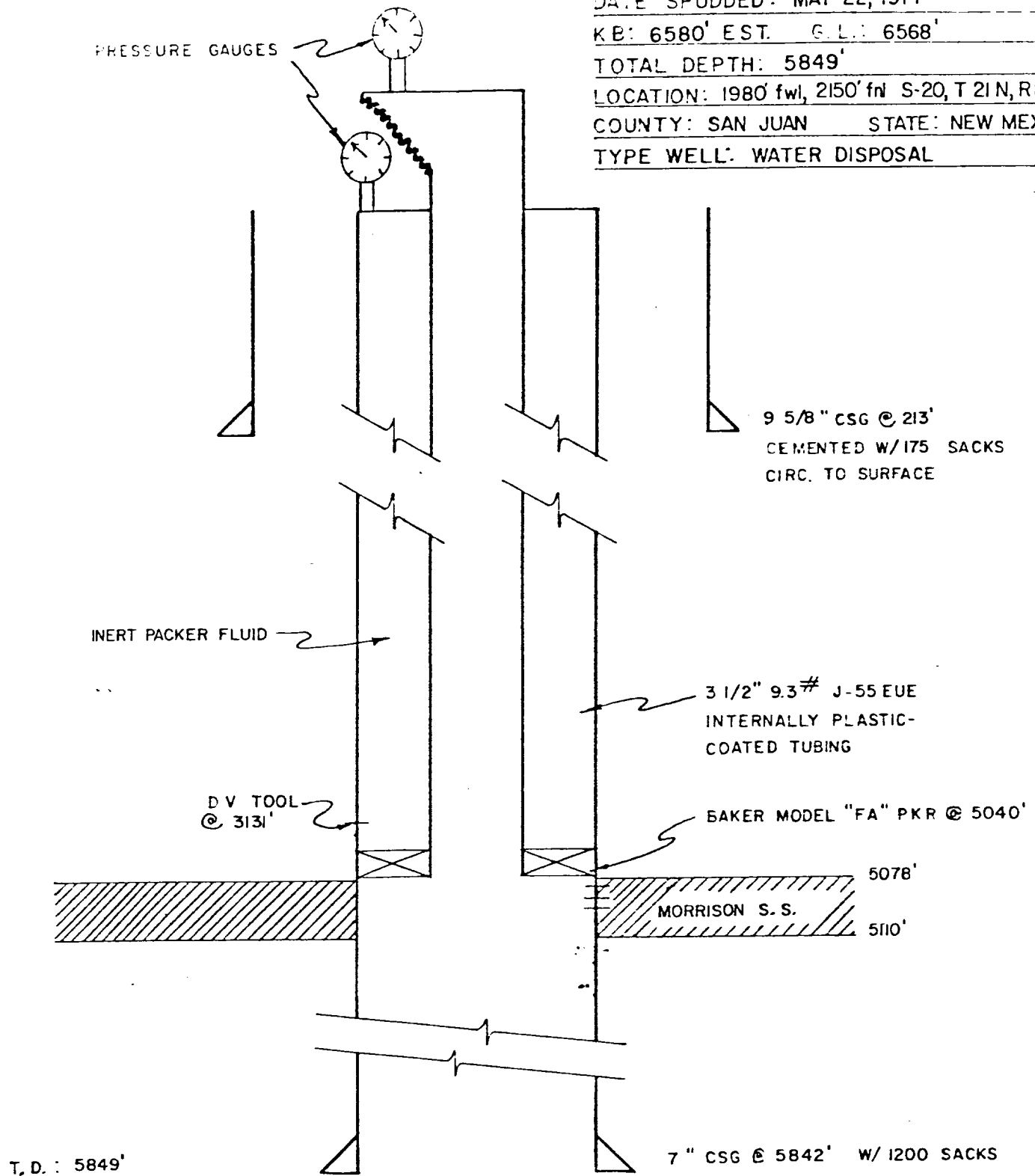
KB: 6580' EST. G.L.: 6568'

TOTAL DEPTH: 5849'

LOCATION: 1980' FWL, 2150' FWL S-20, T 21 N, R 8 W

COUNTY: SAN JUAN STATE: NEW MEX.

TYPE WELL: WATER DISPOSAL



DOME PETROLEUM CORP.

WELL BORE SCHEMATIC

SCALE: NONE

DRAWN BY: WEB CHECKED BY: