Form 3160-5- (JUNE 1990) [—]	-	NITE ^{D-STATES} [OF '1 INTERIOR		FORM APPROVED Budget Bureau No. 1004-0135
	BUREAU O	F LAND MANAGFMENT	NM Oil Cons.	Division Expires: March 31, 1993
		ES AND REPORTS ON WEL	1625 N. French	Desc Designation and Serial No.
Denstan	SUNDRY NOTIC	ES AND REPORTS ON WEL	Hobbs NM 88	240 LC032579ENM-90799
Do not use	this form for proposals	ES AND REPORTS ON WEL to drill or to deepen or reentry to a N FOR PERMIT" for such propo	a different reservoir.	5. If Indian, Allottee or Tribe Name
				7. If Unit or CA, Agreement Designation
	SUBI	MIT IN TRIPLICATE		
1. Type of Well	Oil X Gas Well Well	Other		8. Well Name and No. Terra Carlson Federal #1 2. API Well No.
2. Name of Operator	um Management Co.			
3. Address and Telepl		······································		30025-26950 0. Field and Pool, or Exploratory Area
P O Box 140	907 Irving Texas 750	14-0907		
4. Location of Well (I 330'F	ootage, Sec., T., R., M., or Survey D. NL 2310'FW		. 1	1. County or Parish, State
Sec. 26, T 25				Lea County
		E BOX (s) TO INDICATE NAT		
	F SUBMISSION		TYPE OF AC	TION
L	Notice of Intent	Abandonment	Ļ	Change of Plans
	Subsequent Report	Recompletion	L	New Construction
		Plugging Back	L	Non-Routine Fracturing
—	Final Abandonment Notice	Casing Repair	Ľ	Water Shut-Off
<u>ا</u>			L	Conversion to Injection
			L	Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and log form)
13. Describe Proposed give subsurface loc	for Completed Operations (Clearly stations and measured and true vertical	tate all pertinent details, and give pertinent dates, is depths for all markers and zones pertinent to this	ncluding estimated date of starting any	proposed work. If wells directionally drilled,
**See attachn	PUREAU OF LAND AS 21			
14. I hereby certify Signed	that the foregoing is true and co Second State office use) DRIG. SGD.) DAVID	Title District Supe		ale
Approved by Canditions of appl			UM ENGINEER	ateFEB 0 4 2000
Title 18 U.S.C. Section or representations as to	1001; makes it a crime for any perso any matter within its personal for the	throwingly and willfully to make to any departme	nt or agency of the United States any I	alse, fictitious or fraudulent statements
		TRUVAL.		

Lease Name: Terra Carlson Federal #1 & B 1 LC032579E SW/SE Sec. 26, T 25S, R 37E Gruy Petroleum Management Co.

1.) Name(s) of formations(s) producing water on the lease.

7RV, Queen, Gray Burg.

- 2.) Amount of water produced from each formation in barrels per day.
 - a.) Terra Carlson Federal B #1 none
 - b.) Terra Carlson Federal #1 3 Bbls (7RV)
- 3.) A water analysis of produced water from each zone showing at least the total dissolved solids, pH, and the concentrations of chlorides and sulfates.

See Attached.

4.) How water is stored on the lease.

Water is trucked out by Chaparral Service Inc.

- 5.) How is water moved to dispose facility? Answer same as answer no. 4.
- 6.) Operator's name
 Lease name or well name and number
 Location by 1/4 1/4 section, township, and range of the disposal system.
 The appropriate NMOCD permit number.

Gruy Petroleum Management Co. Terra Carlson Federal B #1 (SW/SE Sec. 26, T 25S, R 37E). Terra Carlson Federal #1 (NE/NW Sec. 26, T 25S, R 37E).

CAPITAN CHEMICAL WATER ANALYSIS REPORT

Compon	y : GRUY PETROLEUM MGMT.		- D -						
				Date Sampled : 1/12/00					
Lease Name : TERRA CARSON FEDERAL			Capitan Rep. : JOE HUGHES						
	ell Number : # 1				Company Rep. :				
Location	:								
_	ANALYSIS								
	рН	7.76							
	Specific Gravity @ 60/60 F.	1.044							
3.	CaCO3 Saturation Index @ 80 F.	+0.622	'Calcium Carbonate Scale Possible'						
	@ 140 F.	+1.562		Calcium C	arbo	onate Scale	Possible'		
_	Dissolved Gasses								
4.	Hydrogen Sulfide	200	ļ	PPM					
5.	Carbon Dioxide	50	1	PPM					
6.	Dissolved Oxygen	Not Determined							
I	Cations	mg/L	1	Eq. Wt.	=	MEQ/L			
7.	Calcium (Ca++)	150	1	20.1	=	7.46	-		
8.	Magnesium (Mg++)	1,883	1	12.2	=	154.36			
9. :	Sodium (Na+) Calculated	14,750	1	23.0	=	641.30			
10.	Barium (Ba++)	Not Determined	1	68.7	=	0.00			
_	Anions								
11.	Hydroxyl (OH-)	0	1	17.0	=	0.00	-		
12. (Carbonate (CO3=)	0	1	30.0	=	0.00			
13.	Bicarbonate (HCO3-)	3,113	1	61.1	=	50.96			
14. 5	Sulfate (SO4=)	5,089	1	48.8	=	104.28			
15. (Chloride (CI-)	23,000	1	35.5	=	647.89			
	Other								
16.	Soluble Iron (Fe)	3	1	18.2	=	0.16	-		
17. 1	Total Dissolved Solids	47,986							
18. 1	Total Hardness As CaCO3	8,125							
19. (Calcium Sulfate Solubility @ 90 F.	3,160							
	Resistivity (Measured)	0.450	(Dhm/Meter	s	@ 56	Degrees (F)		
						—	• • • •		

Logarithmic Water Pattern нсоз S04 S 0 -- 10,000 1,000 100 10 1 1 10 100 1,000 10,000 S βΰ e L ŝ

PROBABLE MINERAL COMPOSITION								
COMPOUND	Eq. Wt.	Х	MEQ/L	=	mg/L			
Ca(HCO3)2	81.04	Х	7.46	=	605			
CaSO4	68.07	Х	0.00	=	0			
CaCl2	55.50	Х	0.00	=	0			
Mg(HCO3)2	73.17	Х	43.49	=	3,182			
MgSO4	60.19	Х	60.79	=	3,659			
MgCl2	47.62	Х	50.08	=	2,385			
NaHCO3	84.00	Х	0.00	=	0			
NaSO4	71.03	Х	43.49	=	3,089			
NaCl	58.46	Х	597.81	=	34,948			



PRODUCTION SYSTEM ___OPEN _.

- 1. Oil Sales by truck.
- 2. Seal Requirements.
 - A. Production Phase:
 - (1) All valves are sealed closed with the exception of fill and equalizer lines.
 - B. Sales Phase:
 - (1) Fill line valve sealed on tank forsale.

Wells: Terra Carlson Federal #1

