Form 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

RECEIVED
JUL 3 11 22 AM '91

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.
NM-40452

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Shinnery "14" Federal

9. WELL NO.
5

10. FIELD AND POOL, OR WILDCAT
Und. West Corbin Delaware

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 14-18S-32E

12. COUNTY OR PARISH: Lea
13. STATE: NM

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [X] GAS WELL [ ] OTHER

2. NAME OF OPERATOR
Santa Fe Energy Operating Partners, L.P.

3. ADDRESS OF OPERATOR
550 W. Texas, Suite 1330, Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
Unit H
2310' FNL & 660' FEL, Sec. 14, T-18S, R-32E, NMPM

14. PERMIT NO.
API #30-025-30719

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3834' KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING CASING
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	ABANDONMENT*
REPAIR WELL	CHANGE PLANS	(Other)	
(Other) Convert to SWD	X	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Subject well is currently SI. Existing perforations are as follows:
4990-5000'
5992-6016'
6090-6180'
6438-6466'
6511-6532'

6590-6626'
6748-6790'

The TD is 8782' and the PBD is 8515'.
We propose to install 2-7/8" 6.5# plastic coated tubing set on a retrievable packer at approximately 4915' and dispose of lease and off-lease produced water into the Grayburg/Delaware perforations listed above. Additional information, including NTL-2B requirements and copies of SWD permit application data is attached.

Subject to
Like Approval
by State

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Sr. Staff Engineer DATE 7-1-91

(This space for Federal or State office use)

APPROVED BY _____ TITLE PETROLEUM ENGINEER DATE 8/22/91
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Information Required per NTL-2B
for Bureau of Land Management - Carlsbad
Disposal in the Subsurface
Shinnery "14" Federal No. 5

ITEM 1 **WELL NAME**

Shinnery 14 Federal No. 5
2310' FNL & 660' FEL, Section 14-18S-32E, NMPM
Lease No. NM-40452

ITEM 2 **DISPOSAL WATER QUALITY AND VOLUMES**

The water to be disposed consists of Delaware and Bone Spring produced water gathered from the Shinnery Lease and other nearby leases. Representative water and other nearby leases. Representative water analysis for the Delaware and Bone Spring in this area is attached. The TDS of the disposal water should range from 151,000 to 189,000 mg/l.

We anticipate an average injection volume of approximately 1000 BPD, and have requested a maximum volume of 2500 BPD. These volumes are consistent with our application to the State of New Mexico, and are based on both our current requirements and those anticipated requirements in the foreseeable future, as the water-cut of our nearby oil wells increases.

ITEM 3 **INJECTION FORMATION AND INTERVAL**

The proposed injection formation is the Grayburg/Delaware, having a top of 4468' and a base of 6806' in the subject well. The current perforations are 4990' to 6790' as shown in the attached wellbore schematic. We do not anticipate needing additional perforations at this time.

ITEM 4 **WATER QUALITY IN THE INJECTION INTERVAL**

The proposed disposal interval is the Grayburg/Delaware which has an inferred TDS content of approximately 151,000 mg/l. A representative analysis for this interval is the same as that submitted for Item 2 above.

ITEM 5 **EXTENT OF ALL USEABLE WATERS IN THE AREA**

Based on our communications with the New Mexico State Engineer's office and our visual observation, there are no fresh water wells within one mile of our proposed disposal well. Within a 1.8 to 5.0 mile radius of the proposed disposal site there are or have been fresh water wells producing from the Ogallala, Alluvial, & Triassic formations at reported depths ranging from 46' to 270'. We are not aware of any deeper fresh water resources, but we note that surface casings of oil wells are typically set at depths of about 400' to 600' in this area.

Additional information on fresh water resources in this area is provided on the attachment which we supplied to the New Mexico OCD.

ITEM 6 **WELL, HOLE, CASING, AND CEMENT INFORMATION**

The information required by this instruction is furnished in both tabular and schematic format on the attachments.

ITEM 7 **THE TD AND PBD**

The total depth is 8782' and the plugged back depth is 8515'. See wellbore schematic.

ITEM 8 **PROPOSED COMPLETION METHOD**

We propose to run a 2-7/8" internally plastic coated tubing attached to a double-grip mechanically set 2-7/8" x 5-1/2" retrievable packer. The end of tubing and the setting depth of the packer is proposed for approximately 4915'. The anticipated injection pressure is 1200 psi. The tubing-casing annular space will be filled with 2% KCl water containing a corrosion inhibitor and an oxygen scavenger.

Injection is proposed thru existing perforations from 4990' to 6790'.

ITEM 9 **MONITOR PLANS**

We have already tested casing integrity in conjunction with a recent injectivity test; however, we will repeat this test per OCD requirements by applying a positive pressure to the tubing-casing annulus after setting the packer for injection.

We plan to monitor disposal rates and pressures daily, and annular pressures at least monthly for any anomalous readings which might indicate a significant change in downhole conditions or communication between the tubing and the tubing-casing annulus. We plan to run tracer surveys at such a frequency as may be dictated by our surface recordings or as may be required by the BLM or the OCD.

If shut-in is required, the master valve will be shut and no produced water will be accepted by the facility until appropriate repair action has been taken.

AJW:dw-2541