Form 3160-3 (November 1983) formerry 9-331C)

SUBMIT IN T ICATE\*

(Other instructions on reverse side)

30-015-2757

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

# DASSESS WOUNTED STATES ASSESSARTMENTADE THE INTERIOR

BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.

<del> </del>	NM-77046						
APPLICATION	6. IF INDIAN, ALLOTT	B OR TRIBE NAME					
a. TIPE OF WORK  DRI b. TIPE OF WELL	LL 🗓	DEEPEN		PLUG BAC	CK 🗆	7. UNIT AGREEMENT	NAMB
on XX a	e de Apros	) 1993		NOLE RECEIVEDATE	LE 🗍	8. FARM OR LEASE M	
. NAME OF OPERATOR	<del></del>					North Pure G	=
Santa	t	9. WELL NO.	old o redera				
. ADDRESS OF OPERATOR			,	-1-30 <u>- 100</u> 0	7		
5 <b>50</b> W.	10. FIELD AND POOL, OR WILDCAT						
LOCATION OF WELL (R		Undesignated Delaware					
(G), 1	11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA						
At proposed prod. son							
4. DISTANCE IN MILES	AND DIRECTION FROM NEAD	TET TOWN OR POS	T APPIC			Sec. 8, T-23	
	st of Loving, No		0	•		12. COUNTY OR PARIS	1
5. DISTANCE FROM PROPE		- HEATED	16 NO	. OF ACRES IN LEASE	17 NO (	OF ACRES ASSIGNED	NM
LOCATION TO NEAREST PROPERTY OR LEASE I	INE, FT.	1980'	20	320		TO THIS WELL	
Also to nearest drig	g. unit line, if any)		10 50	OPOSED DEPTH	90	40	
TO NEAREST WELL, D	RILLING, COMPLETED,	13201	19. 14	8200'	20. ROTARY OR CABLE TOOLS		
1. ELEVATIONS (Show wh			1		<u> </u>	Rotary  22. APPROX. DATE W	
3301' G		ad Control	led V	Vater Basin		August 15	
3.	·			CEMENTING PROGRA		August 13	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER P	240. 14 00.14	A CONTRACTOR OF THE PROPERTY OF THE PARTY OF	M. 		
17-1/2"	13-3/8"	48.0		SETTING DEPTH	600	QUANTITY OF CEMENT	
12-1/4"	8-5/8"	32.0		600' 4130'		sx to circulate	
7-7/8"	5-1/2"	15.5		8200'	2000 sx to circulate To tie back to 4130'		
productive, 5 plugged and a programs as p attachments:  Drilling Exhibit Exhibit Exhibit Exhibit	drill to a dep1/2" casing will bandoned in a mater Onshore Oil  Program A - Operations B - BOP and Cho C - Drilling Flo D - Auxiliary E	11 be cemer anner consi and Gas Ord Plan ke uid Program quipment	nted alstentder No	Exhibit E - T Exhibit E - T Exhibit F - P Exhibit G - W Surface Use A APPROVAL GENERAL SPECIAL S	product Regulat ed in t opo Mar lat Sho ell Sin REQUIRES	cive, the well cions. Specific he following of Location owing Existing te Layout rapions Plan MENTS AND LONG.	Will be Fic  Wells  IA-1  2-50 93  VL TAFI  Bed new productive
one. If proposal is to reventer program, if an 34.	drill or deepen directions	ally, give pertinen		on subsurface locations at		d and true vertical dep	oths. Give blowout
(This space for Fede	erai or State office use)						
APPROVED BY	Lathy O	aton 11	TLE #	Approval Date	Duc	101 DATE 7	-16-93

DISTRICT I P. O. Box 1980 Hobbs, NM 88240

DISTRICT II P. O. Drawer DD Artesia, NM 88210

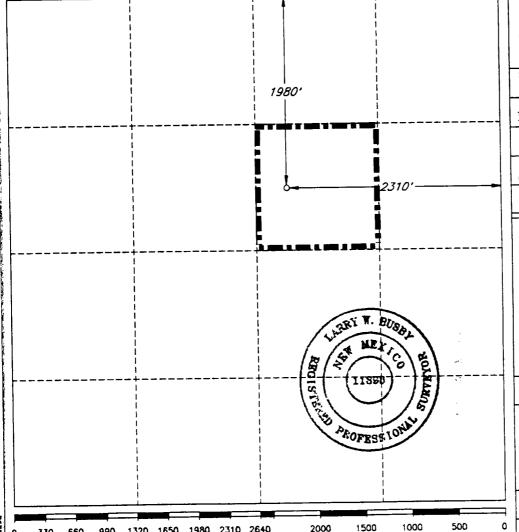
# OIL CONSERVATION DIVISION P. O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III 1000 Rio Brozos Rd

# WELL LOCATION AND ACREAGE DEDICATION PLAT

ztec, NM 87		I distances must be fro	m the outer boun	daries of the sect	tion.	
Operator		OPER. PART, L.P.	Lease	GOLD '8' FE	Well No.	
Unit Letter	Section	Township	Range		County	
G 8		23 SOUTH	31 EAST, N.M.P.M.		EDDY	
Actual Pootage L	ocation of Well					
1980	feet from the	NORTH line at	ad 2310	feet from th	ne EAST line	
Ground Level Ele	v. Producing F	ormation	Pool			
3301'	Dela	ware	Undesigna	ted Delaware	40 Acres	
to w 3. If m been If the No o	orking interest one than one led consolidated by Yes \( \begin{array}{cccccccccccccccccccccccccccccccccccc	and royalty).  ase of different ownershi  y communitization, unitize  of If answer is "yes  of, list the owners and  this form if neccessary  assigned to the well a  cooling, or otherwise) or	p is dedicated to ration, forced—poo ", type of conso tract descriptions .)	the well, have the ling, etc.? olidation which have actual are been consolidated unit, eliminati	ownership thereof (both as e interest of all the owners  Ily been consolidated. (Use dated (by communitization, ing such interest, has been	
	   				OPERATOR CERTIFICATION  I hereby certify that the information herein is true and complete to the best of my	



990 1320 1650 1980 2310 2640

330

660

knowledge and belief.

Signature Dancel Printed Name Darrell Roberts Position Sr. Drilling Engineer Company Santa Fe Energy Operating Partners, L.P. 417/93

#### SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

MARCH 11, 1993

Signature and Seal of Professional Surveyor

Certificate No.

R.P.S. #11398 LARRY W. BUSBY

V.H.B. JOB NO. 94841

#### DRILLING PROGRAM

# SANTA FE ENERGY OPERATING PARTNERS, L.P.

North Pure Gold 8 Federal No. 7

In conjunction with Form 3160-3, Application to Drill the subject well, Santa Fe Energy Operating Partners, L.P., submits the following ten items of pertinent information in accordance with Onshore Oil & Gas Order No. 10.

1. Geologic Name of Surface Formation: Alluvium

2. Estimated Tops of Significant Geologic Markers:

Rustler Anhydrite	750'
Base of Salt	3840'
Delaware "Ramsey" Sand	4170'
Cherry Canyon	5070'
Brushy Canyon	7790'
Bone Spring	8060'
Total Depth	8200'

3. The estimated depths at which water, oil, or gas formations are expected:

Water None expected in area
Oil Delaware Sand @ 4170'

Oil Lower Brushy Canyon @ 7790'

4. Proposed Casing Program: See Form 3160-3 and Exhibit A.

5. Pressure Control Equipment: See Exhibit B.

6. Drilling Fluid Program: See Exhibit C.

7. Auxiliary Equipment: A mud logging unit will be utilized to monitor penetration rate and hydrocarbon shows while drilling below the intermediate casing at 4100'.

8. Testing, Logging and Coring Program:

Testing: None planned

#### DRILLING PROGRAM

North Pure Gold 8 Federal No. 7 Page 2

#### Logging:

Dual Laterolog w/MSFL and Gamma Ray 4100'-8200' Compensated Neutron/Litho-Density/Gamma Ray 4100'-8200' Compensated Neutron/Gamma Ray (thru csg) Surface-4100'

Coring: No conventional cores are planned.

# 9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature is 135 °F and the estimated bottom hole pressure is 3500 psi. No Hydrogen Sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major lost circulation zones have been reported in the offsetting wells.

#### 10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is August 15, 1993. Once spudded, the drilling operation should be completed in approximately 16 days. If the well is productive, an additional 30 days will be required for completion and testing before permanent facilities are installed.

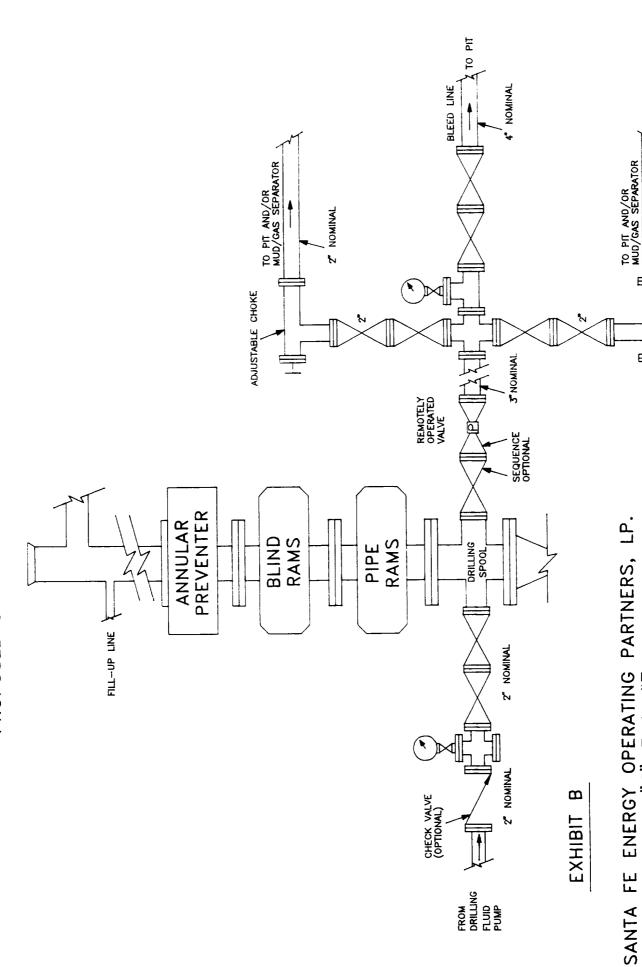
# SANTA FE ENERGY OPERATING PARTNERS,L.P. OPERATIONS PLAN

### North Pure Gold 8 Federal No. 7

- 1. Drill a 17 1/2" hole to approximately 600'.
- 2. Run 13 3/8" 48.0 ppf H-40 ST&C casing. Cement with 600 sx Class "C" cement containing 2% CaCl<sub>2</sub>. Run centralizers on every other joint above the shoe. Apply thread lock to bottom two joints and guide shoe.
- 3. Wait on cement four hours prior to cutting off.
- 4. Nipple up a annular BOP system and test casing to 600 psi.
- 5. Drill a 12 1/4" hole to approximately 4130'.
- 6. Run 8 5/8" 32.0 ppf K-55 ST&C casing. Cement with 1750 sx Cl "C" Lite containing 12 pps salt and 1/4 pps celloflake followed by 250 sx Class "C" with 2% CaCl<sub>2</sub>. Run guide shoe on bottom and float collar two joints of bottom. Centralize every other joint for bottom 400' of casing and place two centralizers in surface casing. Thread lock bottom 2 joints.
- 7. Wait on cement for six hours prior to cutting off.
- 8. Nipple up and install a 3000 psi. Double Ram and Annular BOP system with choke manifold.
- 9. Test BOP system to 3000 psi. Test casing to 1500 psi.
- 10. Drill 7 7/8" hole to 8200'. Run logs.
- 11. Either run and cement 5 1/2" 15.50 ppf K-55 LT&C casing or plug and abandon as per BLM requirements.

Exhibit A
Santa Fe Energy Operating Partners, L.P.
North Pure Gold 8 Federal No. 7
Section 8, T-23S, R-31E
Eddy County, New Mexico

TJM:NPG8



SANTA FE ENERGY OPERATING PARTNERS, LP. North Pure Gold "8" Fed. #7 1980' FNL & 2310' FEL

NOMINAL

REMOTELY OPERATED OR ADJUSTABLE CHOKE

Sec. 8, T-23-S,R-31-E EDDY COUNTY, NEW MEXICO

### PROPOSED DRILLING FLUID PROGRAM

#### 0 - 600'

Spud mud consisting of fresh water gel flocculated with Lime. Use ground paper for seepage control and to sweep the hole. MW-8.5 ppg and Vis-40.

#### 600-4130

Drill out with brine water circulating the inner portion of the reserve pit. Utilize ground paper mixed in prehydrated fresh gel to sweep the hole. MW-10.0 ppg and Vis-28.

#### 4130-8200'

Drill out with cut brine (30,000 ppm chlorides minimum) circulating the outer portion of the reserve pit. Maintain pH at 8.5-9.5 with caustic and sweep the hole as necessary with ground paper. If it becomes necessary to mud up due to hole conditions, utilize a cut brine/Drispac system for 15-20 WL and a Vis of 30-32. MW-8.5/8.9 ppg.

Exhibit C
Santa Fe Energy Operating Partners, L.P.
North Pure Gold 8 Federal No. 7
Section 8, T-23S, R-31E
Eddy County, New Mexico

TJM:NPG8

# **AUXILIARY EQUIPMENT**

DRAWWORKS BDW 650M 650 HP, with Parmac Hydromatic brake

ENGINES Two Caterpillar D-353 diesels rated at 425 HP each

ROTARY Ideco 23", 300 ton capacity

MAST/SUB Ideal 132',550,000 lb rated static hook load with 10 line

Wagner 15' high substructure

TRAVELLING Gardner-Denver, 300 ton, 5 sheave w/ BJ 250 ton hook.

EQUIPMENT Brewster Model 7 SX 300 ton swivel.

PUMPS Continental-EMSCO DC-700 and DB-550, 5 1/2 X 16" Duplex, Compound

driven.

PIT SYSTEM 1-Shale Pit 6X7X35', 1-Settling Pit 6X7X38', 1-Suction Pit 6X7X34' w/ 5 mud

agitators. Two centrifugal mud mixing pumps and a Double Screen Shale

Shaker.

LIGHT Two CAT 3306 diesel electric sets 180 KW prime power.

**PLANT** 

BOP 13 5/8" 5000 psi WP double ram and 13 5/8" 5000 psi WP Shaffer Annular

EQUIP Preventer. Choke manifold rated at 5000 psi. Valvcon 5-station 80 gallon

closing unit.

Exhibit D

Santa Fe Energy Operating Partners, L.P.

North Pure Gold 8 Federal No. 7

Section 8, T-23S, R-31E Eddy County, New Mexico

DDR/tjm NPG8

# LOCATION & ELEVATION VERIFICATION MAP

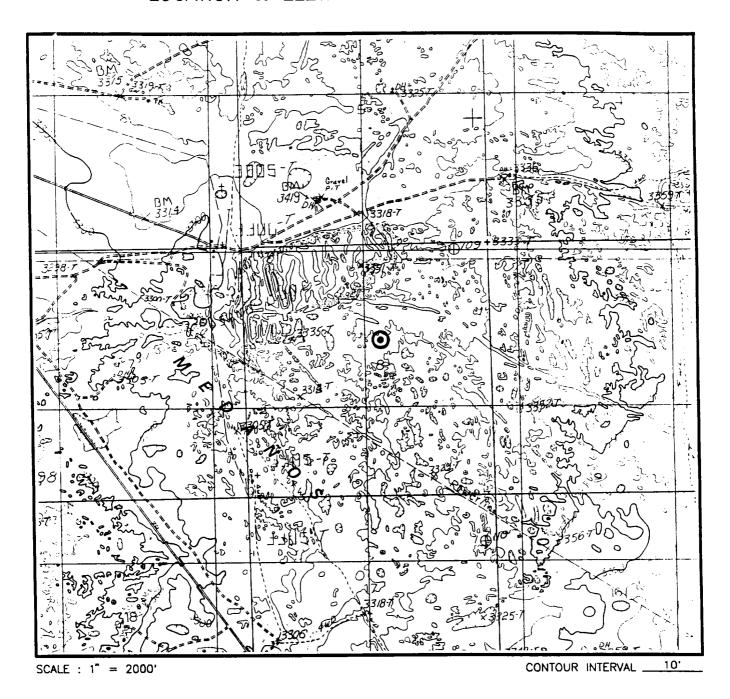
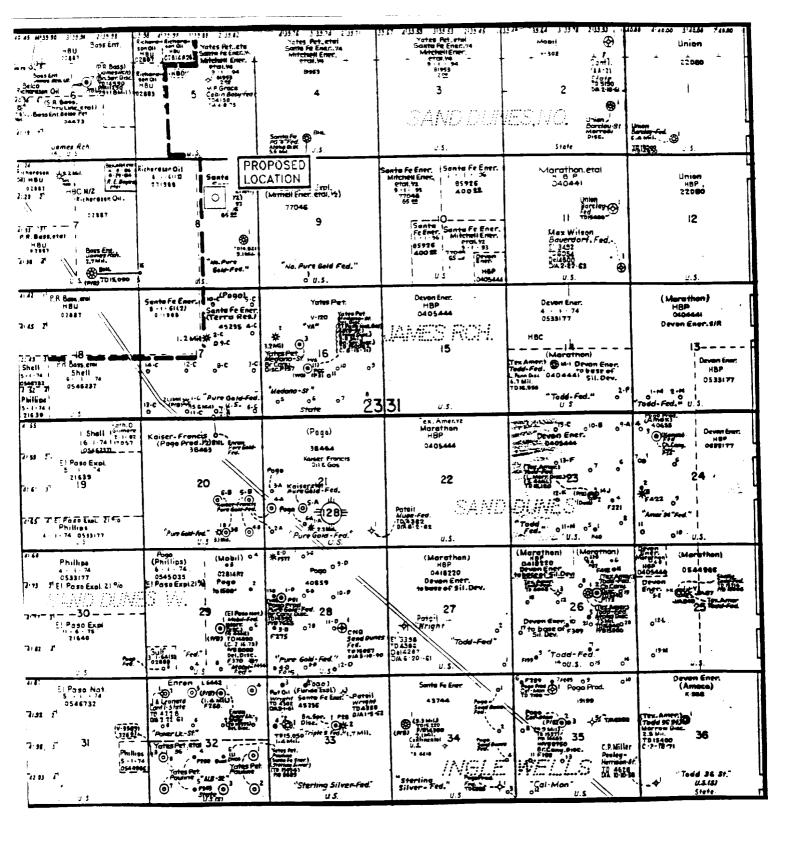


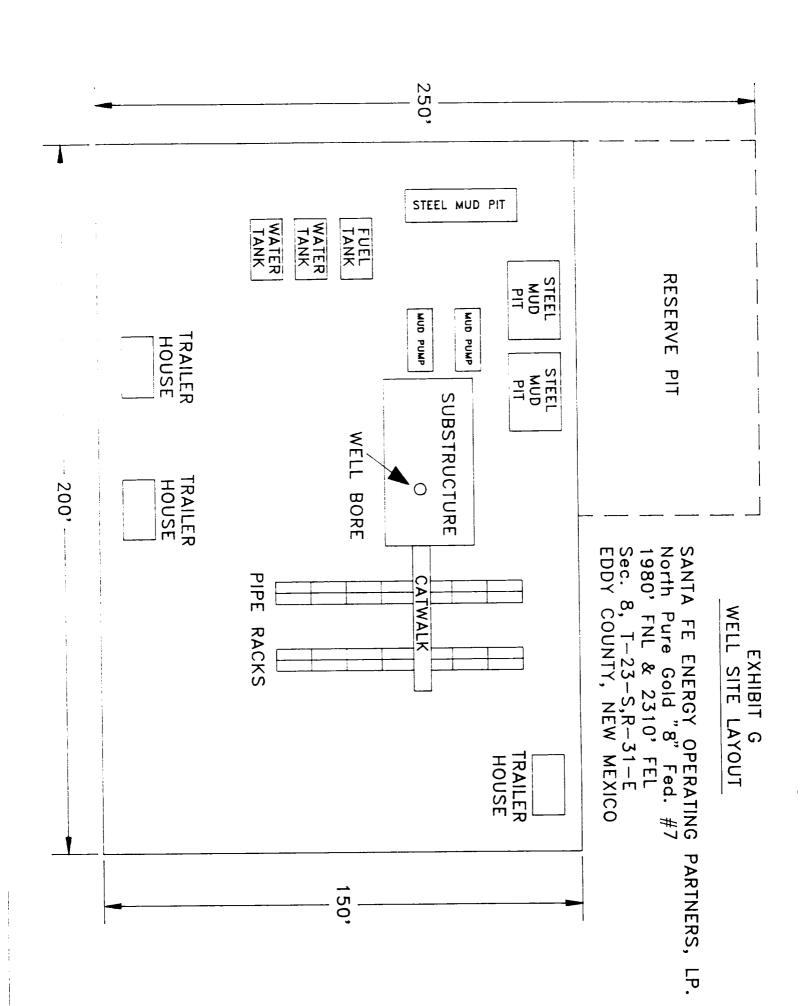
EXHIBIT E

SANTA FE ENERGY OPERATING PARTNERS, LP. North Pure Gold "8" Fed. #7 1980' FNL & 2310' FEL Sec. 8, T-23-S,R-31-E EDDY COUNTY, NEW MEXICO



# EXHIBIT F

SANTA FE ENERGY OPERATING PARTNERS, LP. North Pure Gold "8" Fed. #7 1980' FNL & 2310' FEL Sec. 8, T-23-S,R-31-E EDDY COUNTY, NEW MEXICO



# MULTI-POINT SURFACE USE AND OPERATIONS PLAN SANTA FE ENERGY OPERATING PARTNERS.L.P.

North Pure Gold 8 Federal No. 7 1980' FNL & 2310' FEL Section 8, T-23S, R-31E Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed by rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effects associated with the operation.

#### 1. EXISTING ROADS.

A. Exhibit E is a 15 minute topographic map which shows location of the proposed wellsite and roads in the vicinity. The proposed location is situated approximately 18 miles northeast of Loving, New Mexico.

#### **DIRECTIONS:**

1. From the junction of State Highway 128 and the Lea/Eddy County line, go 6.1 miles West on State Highway 128. Turn northeasterly onto existing lease road and travel 0.4 mile, then northwesterly 0.4 mile, then northeasterly 0.7 mile on lease road, then northwesterly 0.5 mile on lease road to a point 1020' northeast of the location.

#### 2. PLANNED ACCESS ROAD.

A 14' wide access road will be constructed from the existing lease road, approximately 669' south then 351' southeast to the location.

#### 3. LOCATION OF EXISTING WELLS.

A. The Well Locations in the vicinity of the proposed well are shown Exhibits E & F.

#### 4. LOCATION OF EXISTING AND/ OR PROPOSED FACILITIES.

- A. There is one producing gas well (North Pure Gold 8 Fed. No. 1) on this lease at this time.
- B. In the event the well is productive, the necessary production equipment will be installed on the drilling pad. If the well is productive of oil, a gas or diesel self-contained unit will be used to the necessary power.

## Multi-Point Surface Use and Operations Plan

North Pure Gold 8 Federal No. 7

Page 2

#### LOCATION AND TYPE OF WATER SUPPLY

A. It is planned to drill the well with both fresh water and brine water systems. Both types of waters will be hauled to the location by truck over existing roads. Both types will be obtained from commercial sources.

#### 6. SOURCES OF CONSTRUCTION MATERIALS.

A. Any caliche required for construction of the drilling pad will be obtained from a pit located in NW/4 of SW/4 Section 20, which is 3/4 mile south on Twin Wells Road.

#### 7. METHODS OF HANDLING WASTE DISPOSAL

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be either placed in the reserve pits and allowed to evaporate or collected in tanks until hauled to an approved disposal system or a separate disposal application will be submitted to the BLM for appropriate approval.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Human waste will be disposed of per current standards.
- F. Trash, waste paper, garbage, and junk will be collected in trash trailers and disposed of in an approved waste facility such as a land fill. The trash trailers contain all of the material to prevent scattering by the wind.
- G. All debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations.

#### 8. ANCILLARY FACILITIES.

None required

#### 9. WELLSITE LAYOUT

A. Exhibit G shows the dimensions of the well pad and reserve pits, and the location of major rig components.

## Multi-Point Surface Use and Operations Plan

North Pure Gold 8 Federal No. 7

Page 3

- B. The ground surface of the location is located among several sand dunes with vegetation growing on them. The location will constructed by leveling the necessary dune and covering the sand with at least six inches of compacted caliche.
- C. The reserve pits will be plastic lined.
- D. A 400' X 400' work area which will contain the pad and pit area has been staked and flagged.

### 10. PLAN FOR RESTORATION OF THE SURFACE.

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleared of all trash and junk, to leave the wellsite in an aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluid will be fenced until they have been filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and the United States Geological Survey will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and levelled within 300 days after abandonment.

#### 11. TOPOGRAPHY

- A. The wellsite and access route are located in a relatively flat area.
- B. The top soil at the wellsite is sandy.
- C. The vegetation cover at the wellsite is moderately sparse, with prairie grasses, some mesquite bushes, and shinnery oak.
- D. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- E. There are no ponds, lakes, streams, or rivers within one mile of the wellsite.
- F. There is no evidence of any archaeological, historical, or cultural sites in the vicinity of the location.

## Multi-Point Surface Use and Operations Plan

North Pure Gold 8 Federal No. 7

Page 4

### 12. OPERATOR'S REPRESENTATIVES.

A. The field representatives responsible for assuring compliance with the approved surface use plan are:

Michael R. Burton **Darrell Roberts Division Operations Manager** Senior Drilling Engineer Santa Fe Energy Operating Santa Fe Energy Operating Partners, L.P. Partners, L.P. 550 W. Texas, Suite 1330 550 W. Texas, Suite 1330 Midland, Texas 79701 Midland, Texas 79701 915-686-6616 - office 915-686-6614 - office 915-699-1260 - home 915-684-4130 - home 915-559-6842 - cellular 915-553-1214 - cellular

#### 13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Santa Fe Energy Operating Partners, L.P., and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

SIGNED this 4th day of April, 1993. Dance Robert

Darrell Roberts, Senior Drilling Engineer

DDR/tjm NPG8