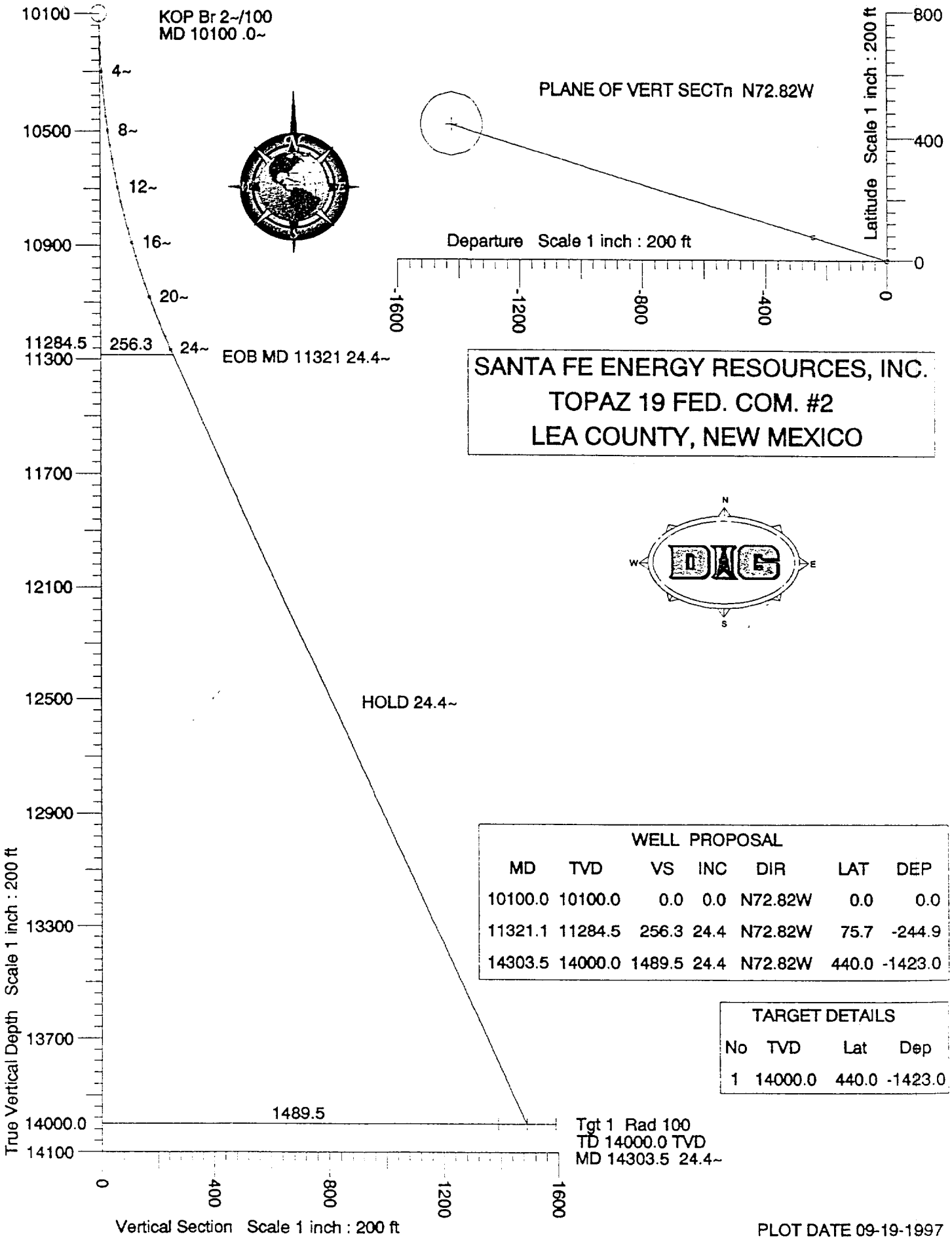

SANTA FE ENERGY RESOURCES, INC.
TOPAZ 19 FED. COM. #2
LEA COUNTY, NEW MEXICO

DIG

WELL PROPOSAL

MD	TVD	VS	INC	DIR	LAT	DEP
10100.0	10100.0	0.0	0.0	N72.82W	0.0	0.0
11321.1	11284.5	256.3	24.4	N72.82W	75.7	-244.9
14303.5	14000.0	1489.5	24.4	N72.82W	440.0	-1423.0

TARGET DETAILS

No	TVD	Lat	Dep
1	14000.0	440.0	-1423.0

PLOT DATE 09-19-1997

TOPAZ TOPAZ 19 FED. COM. #2 9-19-97
Plane of Vertical Section 287.18

Section 1 (Const Dogleg)

MD	Inc	Dir	Tvd	Vsec	Lat	Dep	Values to be applied Build	Turn	Dleg	T Face
10100.0	0.00	287.18	10100.0	0.0	0.0	0.0	2.0	0.0	2.0	0.0
10200.0	2.00	287.18	10200.0	1.7	0.5	-1.7	2.0	0.0	2.0	0.0
10400.0	6.00	287.18	10399.5	15.7	4.6	-15.0	2.0	0.0	2.0	0.0
10600.0	10.00	287.18	10597.5	43.5	12.9	-41.6	2.0	0.0	2.0	0.0
10800.0	14.00	287.18	10793.1	85.1	25.1	-81.3	2.0	0.0	2.0	0.0
11000.0	18.00	287.18	10985.3	140.2	41.4	-134.0	2.0	0.0	2.0	0.0
11200.0	22.00	287.18	11173.2	208.6	61.6	-199.3	2.0	0.0	2.0	0.0

Section 2 (Hold Section)

MD	Inc	Dir	Tvd	Vsec	Lat	Dep	Values to be applied Build	Turn	Dleg	T Face
11321.1	24.42	287.18	11284.5	256.3	75.7	-244.9	0.0	0.0	0.0	0.0
11400.0	24.42	287.18	11356.3	288.9	85.3	-276.1	0.0	0.0	0.0	0.0
11600.0	24.42	287.18	11538.4	371.6	109.8	-355.1	0.0	0.0	0.0	0.0
11800.0	24.42	287.18	11720.5	454.3	134.2	-434.1	0.0	0.0	0.0	0.0
12000.0	24.42	287.18	11902.6	537.0	158.6	-513.1	0.0	0.0	0.0	0.0
12200.0	24.42	287.18	12084.7	619.7	183.1	-592.1	0.0	0.0	0.0	0.0
12400.0	24.42	287.18	12266.8	702.4	207.5	-671.1	0.0	0.0	0.0	0.0
12600.0	24.42	287.18	12448.9	785.1	231.9	-750.1	0.0	0.0	0.0	0.0
12800.0	24.42	287.18	12631.0	867.8	256.3	-829.1	0.0	0.0	0.0	0.0
13000.0	24.42	287.18	12813.1	950.5	280.8	-908.1	0.0	0.0	0.0	0.0
13200.0	24.42	287.18	12995.2	1033.2	305.2	-987.1	0.0	0.0	0.0	0.0
13400.0	24.42	287.18	13177.3	1115.9	329.6	-1066.1	0.0	0.0	0.0	0.0
13600.0	24.42	287.18	13359.4	1198.6	354.0	-1145.1	0.0	0.0	0.0	0.0
13800.0	24.42	287.18	13541.5	1281.3	378.5	-1224.1	0.0	0.0	0.0	0.0
14000.0	24.42	287.18	13723.6	1364.0	402.9	-1303.1	0.0	0.0	0.0	0.0
14200.0	24.42	287.18	13905.7	1446.7	427.3	-1382.1	0.0	0.0	0.0	0.0
14303.5	24.42	287.18	14000.0	1489.5	440.0	-1423.0	0.0	0.0	0.0	0.0

DRILLING PROGRAM

SANTA FE ENERGY RESOURCES, INC.

TOPAZ "19" FED COM #2

In conjunction with Form 3160-3, Application to Drill the subject well, Santa Fe Energy Resources, Inc. submits the following ten items of pertinent information in accordance with Onshore Oil & Gas Order No. 1.

1. **Geologic Name of Surface Formation:** Alluvium

2. **Estimated Tops of Significant Geologic Markers:**

Rustler Anydrite	1,490'
Top of Salt	1,630'
Base of Salt	3,130'
Yates	3,310'
Delaware	5,400'
Bone Spring	8,350'
1st Bone Spring Sand	9,350'
Wolfcamp	11,250'
Strawn	12,250'
Atoka	12,500'
Morrow	12,850'
Lower Morrow	13,400'
Total Depth	14,000'

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

Water	None expected in area
Oil	Bone Spring 9400'-9500'
Gas	Morrow 13,300'-400'

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 casing point at 5200.

8. **Testing, Logging and Coring Program:**

Drill Stem Tests: (all DST's to be justified on the basis of valid show of oil or gas):

Bone Spring	9400'-9500'
Morrow	13300'-13400'

Logging:

Dual Laterolog W/MSFL and Gamma Ray	5200'-14000'
Compensated Neutron/Litho-Density/Gamma Ray	5200'-14000'
Compensated Neutron/Gamma Ray (thru csg)	Surface-5200'
Phasor Induction/SFL/Gamma Ray	5200'-14000'

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 207 degrees Fahrenheit and the estimated bottom hole pressure is 3650 psi. No Hydrogen Sulfide or other hazardous gases or fluids have been encountered in offset wells, but it is reported to exist in the Yates formation: The Yates formation is covered by the existing 9 5/8" casing string, therefore no Hydrogen Sulfide Drilling Operations Plan is being submitted. 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 B.L.M. The anticipated spud date is October 30, 1997. Once spudded, the drilling operation should be completed in approximately 45 days. If the well is productive, an additional 30 days will be required for completion and testing before permanent facilities are installed.

OPERATIONS PLAN

SANTA FE ENERGY RESOURCES, INC.

Topaz "19" Fed Com #2

1. Remove P & A marker.

2. Weld on well head.

3. Drill out top cement from 0-30' with a rat hole machine.

4. Move in, rig up drilling rig and nipple up BOP's.

5. Pick up 8 3/4" bit and drill out cement plug from 1400-3300', bridge plug at 5500', cement plugs from 5650' to 5750', 6200 to 6300', and 8440' to 8540'.

6. Sidetrack existing well bore at ±10,100' and directionally drill to 14,000'. Run logs.

7. Either run and cement 4000' of 5 1/2" 17 ppg S-95 LT&C casing followed by 10,000' of 5 1/2" 17.0 ppf N-80 LT&C casing in two stages with a stage collar at approximately 10,000' to bring cement to at least 200' inside the 9 5/8" casing or plug and abandon as per B.L.M. requirements.

Exhibit "A"
Santa Fe Energy Resources, Inc.
Topaz "19" Fed Com #2
Section 19, T-20-S, R-34-E
Lea County, New Mexico

EXHIBIT B
SANTA FE ENERGY RESOURCES, INC.
TOPAZ "19" FED COM NO. 2
660' FSL & 2083' FWL
SECTION 19, T-22-S, R-34-E
LEA COUNTY, NEW MEXICO