POWERS ELEVATION

OIL WELL ELEVATIONS — LOCATIONS
ENVIRONMENTAL — ARCHAEOLOGICAL SERVICES
600 SOUTH CHERRY STREET, SUITE 1201
DENVER, COLORADO 80222
PHONE NO. 303/321-2217

October 29, 1981

U.S. Geological Survey
District Supervisor
P.O. Box 3524
Durango, Colorado 81301
Attn: Howard Lemm

A-Gotur #1

RE: Filing NTL-10 (H_2S Contingency Plan)
Kimbark Oil and Gas Company
#1 Gotur
NE NE Sec. 8 T31N R14W
1000' FNL & 820' FEL
San Juan County, New Mexico

SA

Dear Mr. Lemm:

Enclosed are three copies of the NTL-10 (EXHIBITS "E", "H_1", "H_2" and "H_3") for the above-referenced well location.

This plan is designed to provide and assure safe, quick and orderly action to effectively deal with H_2S leaks.

Any efforts made to expedite approval of this plan would be greatly appreciated.

If anything more is required, please advise.

Sincerely yours,

POWERS ELEVATION

Connie L. Frailey

Connie L. Frailey
Vice President, Environmental Services

RECEIVED
NOV 4 - 1981
OIL CON. COM.
DIST. 3

CLF:sb
Enclosures

cc: Chuck Hansen, Kimbark Oil and Gas Company, 1580 Lincoln St., Ste. 700 Denver, Colorado 80203
Gerald Huddleston, Powers Elevation, Durango, Colorado
Frank Chavez, New Mexico Oil Commission, Energy & Minerals Division, 1000 Rio Bravos Road, Aztec, New Mexico 87410
Lyle Van Dover, Realty Officer, Bureau of Indian Affairs, Philip Coyote Memorial Hall, Towoac, Colorado 81334
Steve Stephens, New Mexico OSHA, Albuquerque Field Office, 4219 Montgomery NE, Albuquerque, New Mexico 87109
Undersheriff Dan Sullivan, San Juan County Sheriff's Office, 112½ South Mesa Verde, Aztec, New Mexico 87410
Larry Marcum, Director of Emergency Mobile Services, San Juan Medical Center, 801 W. Maple Street, Farmington, New Mexico 87410
Don McGonagle, County Civil Defense Coordinator, 305 S. Oliver, Aztec, New Mexico 87410

EXHIBIT "E$_1$"

Detail of Access Roads

1. Location:
Kimbark Oil and Gas Company
#1 Gotur
NE NE Sec. 8 T31N R14W
1000' FNL & 820' FEL
San Juan County, New Mexico

Color Coding

- Pipeline Road
- Gravel Road
- Dirt Trail/Road
- New Access Road
- H_2S Escape Route

UTE MOUNTAI

INDIAN RESERVA

Purgatory

Barker

Canyon

Drill Hole

Gas Wello

TRAIL

JEEP

Cholla

Canyon

Ute

Canyon

VERDE

Oil Well

Oil Wello

TWO-MILE RADIUS

EXHIBIT "H_1"

CHECKLIST FOR DRILLING OR WORKOVER
IN HYDROGEN SULFIDE ENVIRONMENT

As stipulated by the U.S. Geological Survey, H_2S safety equipment will be on site, and H_2S safety procedures will be implemented at a prudent depth prior to reaching H_2S bearing zones.

1. There will be a minimum of two safety briefing areas at least 200 feet from the wellhead and arranged so that at least one area will always be upwind of the well at all times. See EXHIBIT "H_2" for layout.

2. The prevailing winds blow from the East in the morning and from the South-Southwest in the afternoon (see EXHIBIT "H_2").

3. A windsock will be installed on top of the derrick and at least three sets of wind streamers on streamer poles will be displayed. One wind sock will also be installed at each of the location protection centers.

4. In case of an accident, a second emergency escape route will be on the site. See EXHIBIT "E" and EXHIBIT "H_2".

5. Masks will be stored in the location protection centers (sheds or trailers) and in other storage facilities located strategically around the operation, so that no person in normal work routine is more than "one breath away" from a mask. Resuscitators with spare oxygen bottle will be provided at each location center or trailer.

6. An automatic hydrogen sulfide monitor will be installed with a combination visual and audible alarm system located where it can be seen and/or heard throughout the drilling location. This system will have the capability of being activated from several points. Additional hydrogen sulfide monitors may be desirable. The automatic hydrogen sulfide monitor will have a probe at the shale shaker and a probe will be positioned at the bell nipple.

7. Every person who will be at the location in any capacity will be familiar with requirements of the emergency procedures and will participate in the training program. This includes operating company personnel, rig personnel, and service company personnel. Personnel training will start in regular safety meetings as soon as possible after the drilling routine is established and will be appropriately intensified as the operation progresses. Minimum personnel training will provide coverage of the following point or programs:

   a. Detailed explanation of the seriousness of encountering hydrogen sulfide in drilling operations.

b. Explanation of rig layout details, prevailing winds, importance of adequate ventilation, use of mechanical blowers (fans), utilization of wind sock and wind streamers, personnel movement in an upwind direction, and evacuation routes.

c. Personnel drills with breathing equipment. These drills will be initiated by actuating the hydrogen sulfide alarm. All personnel will proceed to the designated briefing area in accordance with the emergency procedures, don breathing equipment, and await instructions. They will then perform a short period of rig work routine wearing the breathing equipment.

8. See Contingency Plan (EXHIBIT "H3") for agencies to be notified in case of emergency.

9. Types and Quantities of Mud Additives and Scavengers Available at Location.

DEPTH	TYPE	WEIGHT #/gal.	VISCOSITY-sec./qt.	FLUID LOSS cc
0-700'	Water	8.7-8.8	29-35	NC
700'- TD	LSND	8.8-9.2	32-40	10

Hydrogen sulfide scavengers and necessary additives may be added as required to maintain a concentration in the drilling fluid sufficient to react with all hydrogen sulfide entering the drilling fluid.

10. Corrosion coupon will be used as a detection method. Appropriate corrosion inhibitors will be used, depending on amount of corrosion encountered. Casing equipment specifically designed for H_2S drilling will be used.

11. Well-marked, highly visible warning signs and flags will be placed on all access roads to the location.

12. Necessary provisions will be taken for blocking or monitoring access to the location during critical operations. No unauthorized personnel will be allowed on location during drill stem tests through H_2S zones.

13. Ventilation fan will be placed under the rig floor, as shown on EXHIBIT "H2".

14. Esse International, Inc., specialists in H_2S safety procedures, will be on location when drilling reaches 500 feet above possible H_2S zone. Esse personnel, the drilling contractor (Brinkerhoff-Signal, Inc) and authorized Kimbark Oil and Gas Company personnel will be selected to ignite flow in case of uncontrolled blowout.

15. Swabbing or drill stem testing fluids containing H_2S will be sent through a separator to permit flaring of gas. Flare will have continuous pilot to insure ignition of all such gas.

EXHIBIT "H_2"

H_2S Safety Features

Kimbark Oil and Gas Company
#1 Gotur
NE NE Sec. 8 T31N R14W
San Juan County, New Mexico

POWERS ELEVATION

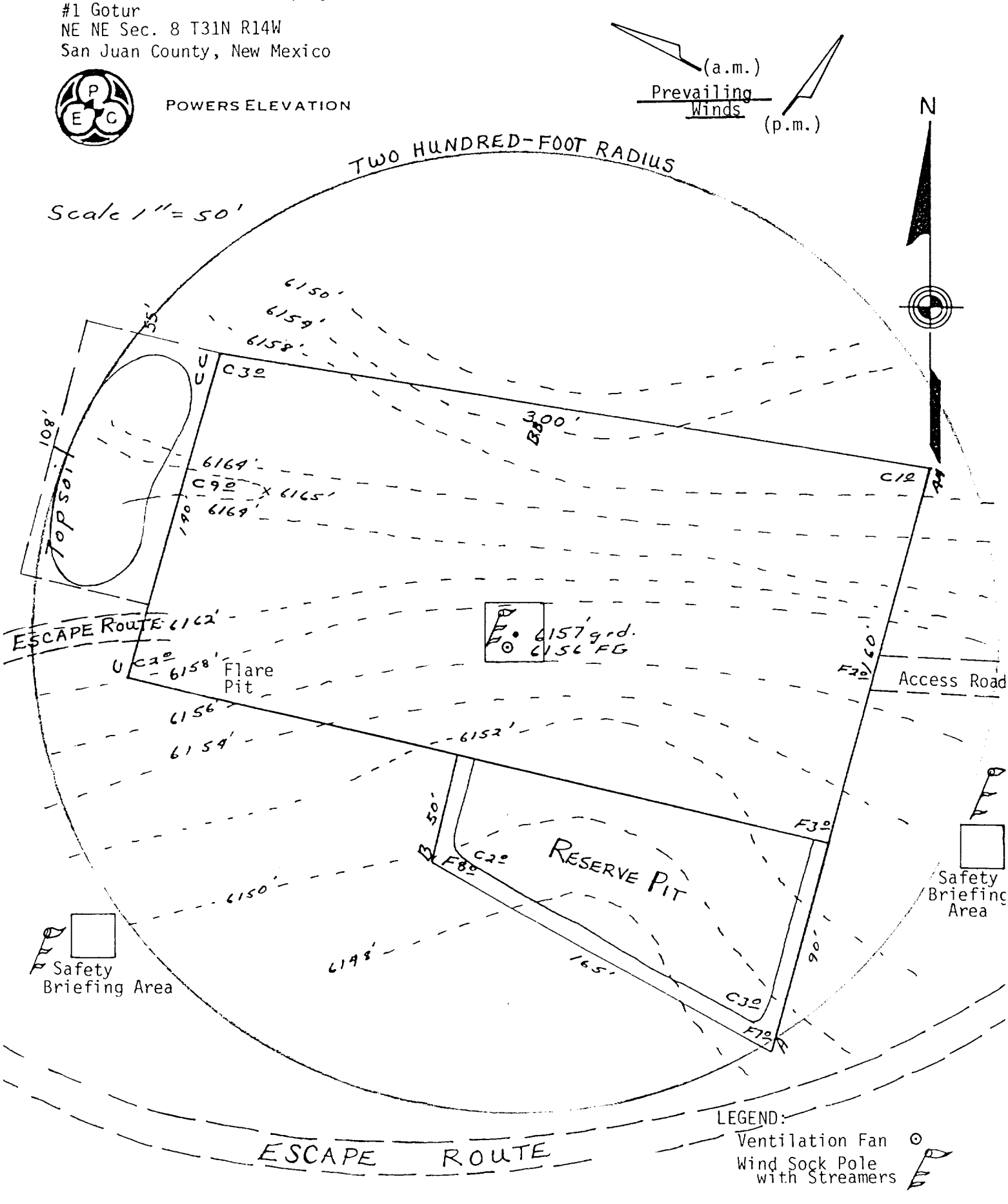

EXHIBIT "H_3"

CONTINGENGY PLAN

(Agencies to Notify in the Event of an Emergency)

A. EMERGENCY MEDICAL ATTENTION

San Juan Medical Center
Farmington, New Mexico
Attn: Mr. Larry Marcum, Director of Emergency Mobile Services
Phone: (505) 325-5011

The hospital is approximately 22 miles Southeast of the location. Four ambulances are available. A topographic access map will be sent to San Juan Medical Center prior to spudding the well to have on file should an emergency occur.

B. NEW MEXICO CIVIL DEFENSE OFFICE

County Civil Defense Coordinator (Aztec)
Don McGonagle (505) 334-9431

State Civil Defense Director (Santa Fe)
Richard R. Reid (505) 471-7838

C. NEW MEXICO OIL COMMISSION (Aztec)

Frank Chavez, Charles Gholson (505) 334-6178

D. U.S. GEOLOGICAL SURVEY (Grand Junction, CO)

John Price, District Supervisor
Howard Lemm (303) 245-8052

E. BUREAU OF INDIAN AFFAIRS (Towoac, CO)

Lyle Van Dover, Realty Officer (303) 565-8471

F. SAN JUAN COUNTY SHERIFF (Aztec)

Sheriff - Douglas Brown (505) 334-6107
Undersheriff - Dan Sullivan

G. FIRE DEPARTMENT (Farmington)

Emergency (505) 325-3501
A.W. Conners, Fire Chief (505) 325-3501

Valley Fire District (Volunteer), Kirtland
Mr. Haney (505) 598-5311

H. OSHA

State Field Office (Albuquerque)
Steve Stephens, Program Manager (505) 842-3387

Federal (Albuquerque)
Jim Knorpp, Director (505) 766-3411

J. CLOSEST OCCUPIED DWELLINGS

There are no occupied dwellings (or buildings of any sort) within a two-mile radius of the location.