



**Southwestern Energy  
Company**

**Southwestern Energy Production Company  
2350 N. Sam Houston Parkway East  
Suite 300  
Houston, Texas 77032**

**RECEIVED  
JAN 04 2005  
ODU-ARTESIA**

## **Hydrogen Sulfide (H<sup>2</sup>S) Contingency Plan**

**For**

**No Bluff #3**

**And**

**No Bluff #4**

## **No Bluff #3 and No Bluff #4**

These wells are open drilling sites. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of the zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.

Assumed 100 ppm ROE = 3000' (Radius of Exposure)  
100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

### **Escape:**

Escape will be by taking the lease road going west approximately 0.2 miles. Continue past the "Y" intersection approximately 0.1 miles and turn right. Go northwest for approximately 1.0 miles to co. road #225 traveling northeast until the intersection of co. road #204. Travel northwest on co. road #204 until crossing hwy 82. 9.5 west is the town of Artesia.

### **Emergency Procedures**

In the case of a release of gas containing H<sub>2</sub>S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries during the response.

### **Ignition of Gas Source**

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

## Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

## Contacting Authorities

Southwestern Energy Production Company personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the NMOCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Southwestern Energy Production Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

### Southwestern Energy Production Call List      Office      Cellular

Bruce Drummon – Production Foreman.....505-393-1850..... 505-631-8083  
 Kurt Butler – Production Engineer .. .....281-618-4749..... 713-569-2926  
 Wilton Townsend – Drilling Consultant.....281-618-4869..... 713-898-5976  
 Sonny Bryan – Drilling Manager..... .....281-618-4769..... 713-502-4046  
 Mike McAllister – HSE Manager .... .....281-618-4824..... 713-560-0856

## Agency Call List

### Eddy County (505)

#### Artesia

State Police .....746-2703  
 City Police.....746-2703  
 Sheriff's Office .....746-9888  
 Ambulance .....911  
 Fire Department .....746-2701  
 LEPC (Local Emergency Planning Committee) .....746-2122  
 NMOCD.....748-1283

**Carlsbad**

State Police .....885-3137  
City Police.....885-2111  
Sheriff's Office.....887-7551  
Ambulance.....911  
Fire Department.....885-2111  
LEPC (Local Emergency Planning Committee)..... 887-3798  
US Bureau of Land Management.....887-6544

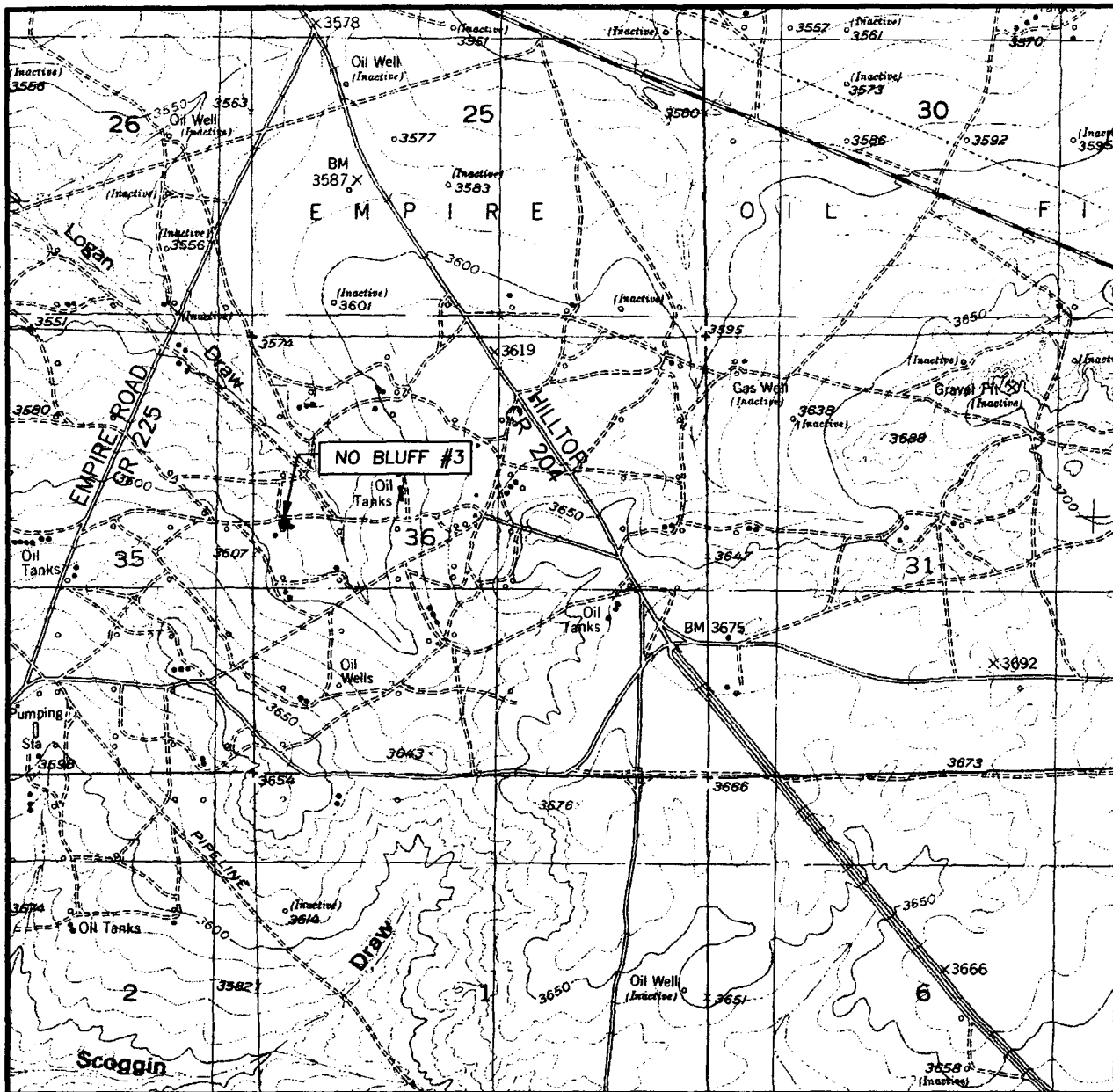
New Mexico Emergency Response Commission (Santa Fe) (505)476-9600  
24 HR .....(505) 827-9126  
National Emergency Response Center (Washington, DC) ...(800) 424-8802

**Other**

Wild Well Control (281) 353-5481  
Boots & Coots IWC 1-800-256-9688 or (281) 931-8884  
Cudd Pressure Control (915) 699-0139 or (915) 563-3356  
Halliburton .....(432) 682-4305  
B. J. Services.....(505) 392-5556  
B.J. Services (505)746-3140  
Schlumberger (505) 748-1391

Flight For Life -4000 24th St, Lubbock, TX .....(806) 743-9911  
Aerocare -Rr 3 Box 49f , Lubbock, TX .....(806) 747-8923  
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM .....(505) 842-4433  
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM ....(505) 842-4949

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
REDLAKE, N.M. - 10'

SEC. 36 TWP. 17-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

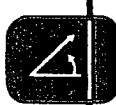
DESCRIPTION 2264' FNL & 366' FWL

ELEVATION 3595'

OPERATOR SOUTHWESTERN ENERGY  
PRODUCTION COMPANY

LEASE NO BLUFF

U.S.G.S. TOPOGRAPHIC MAP  
REDLAKE, N.M.

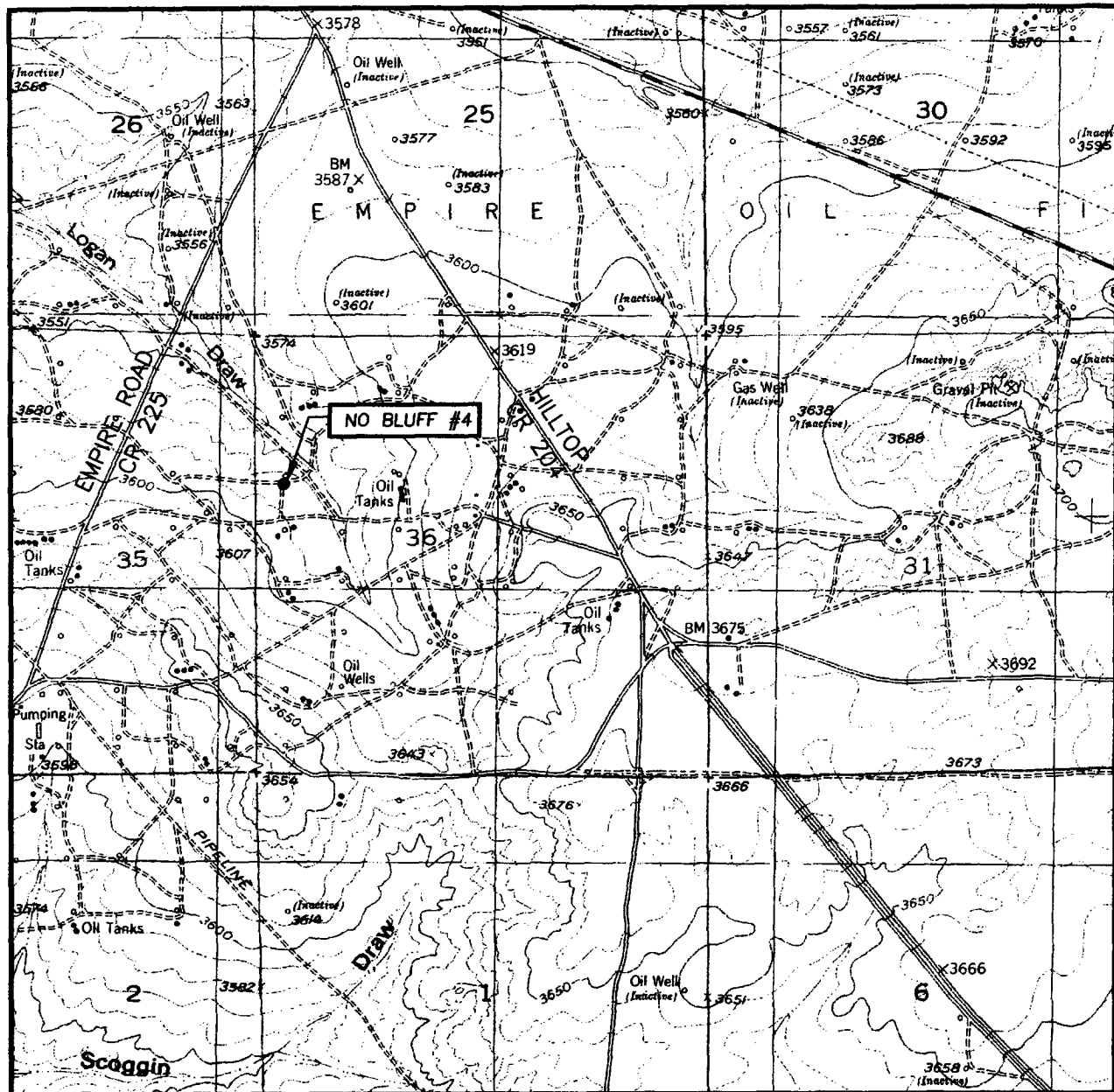


PROVIDING SURVEYING SERVICES  
SINCE 1946

**JOHN WEST SURVEYING COMPANY**

412 N. DAL PASO  
HOBBS, N.M. 88240  
(505) 383-3117

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
REDLAKE, N.M. - 10'

SEC. 36 TWP. 17-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1765' FNL & 330' FWL

ELEVATION 3583'

OPERATOR SOUTHWESTERN ENERGY  
PRODUCTION COMPANY

LEASE NO BLUFF

U.S.G.S. TOPOGRAPHIC MAP  
REDLAKE, N.M.

