

### Hydrogen Sulfide Drilling

### **Operations Plan**

#### **Matador Resources**

### 1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects and hazards
- Principal and operation of H2S detectors, warning system and briefing areas
- Evacuation procedures, routes and first aid
- Proper use of safety equipment & life support systems
- Essential personnel meeting medical evaluation criteria will receive additional training on the proper use of 30min pressure demand air packs

#### 2 H2S Detection and Alarm Systems:

- H2S sensor/detectors to be located on the drilling rig floor, in the base of the sub structure / cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary
- . An audio alarm system will be installed on the derrick floor and in the doghouse

#### 3 Windsocks and / Wind Streamers:

- Windsocks at mud pit area should be high enough to be visible
- Windsock on the rig floor and / top of doghouse should be high enough to be visible

### 4 Condition Flags and Signs:

- Warning sign on access road to location
- Flags to be displayed on sign at entrance to location
  - o Green Flag Normal Safe Operation Condition
  - Yellow Flag Potential Pressure and Danger
  - Red Flag Danger (H2S present in dangerous concentrations) Only H2S trained personnel admitted on location

#### 5 Well Control Equipment:

See Number 22 on APD

### 6 Communication:

- While working under masks chalkboards will be used for communications
- Hand signals will be used where chalk board is inappropriate
- Two way radio will be used to communicate off location in case of emergency help is required.
   In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.



# 7 **Drilling Stem Testing:**

• No DST cores are planned at this time

8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubulars good and other mechanical equipment

9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary

## 11 Emergency Contacts

See exhibit E-1

# Exhibit E-1: H2S Contingency Plan Emergency Contacts Marlan Downey State 3-23S-35E AR #111H Matador Resources Company

Sec. 9, 23S, 35E Lea County, NM

Company Office			
Matador Resources Company	(972)-371-5200		
Key Personnel			
Name	Title	Office	Mobile
Billy Goodwin	Vice President Drilling	972-371-5210	817-522-2928
Gary Martin	<b>Drilling Superintendent</b>		601-669-1774
Dee Smith	<b>Drilling Superintendent</b>	972-371-5447	972-822-1010
Adam Lange	Drilling Engineer	972-371-5247	214-458-0788
	<b>Construction Superintendent</b>		
	<b>Construction Superintendent</b>		
Artesia			
Ambulance		911	
State Police		575-746-2703	
City Police		575-746-2703	
Sheriff's Office		575-746-9888	
Fire Department		575-746-2701	
<b>Local Emergency Planning Commit</b>	tee	575-746-2122	
New Mexico Oil Conservation Divis	ion	575-748-1283	
Carlsbad			
Ambulance		911	
State Police		575-885-3137	
City Police		575-885-2111	
Sheriff's Office		575-887-7551	
Fire Department		575-887-3798	
Local Emergency Planning Committee		575-887-6544	
New Mexico Oil Conservation Division		575-887-6544	
Santa Fe			
New Mexico Emergency Response Comission (Santa Fe)		505-476-9600	
New Mexico Emergency Response Comission (Santa Fe) 24 hrs		505-827-9126	
New Mexico State Emergency Operations Center		505-476-9635	
National			
National Emegency Response Center (Washington, D.C.)		800-424-8802	
Medical			
Flight for Life- 4000 24th St.; Lubbock, TX		806-743-9911	
Aerocare- R3, Box 49F; Lubbock, TX		806-747-8923	
Med Flight Air Amb- 2301 Yale Blvd S.E., D3; Albuquerque, NM		505-842-4433	
SB Air Med Service- 2505 Clark Carr Loop S.E.; Albuquerque, NM		505-842-4949	
Other			
Boots & Coots IWC		800-256-9688	or 281-931-888
Cudd Pressure Control		432-699-0139	or 432-563-335
Haliburton		575-746-2757	
B.J. Services		575-746-3569	

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