30-025-41176

#### HOBBS OCD

APR 2 6 2013

## Hydrogen Sulfide Drilling Operations Plan **Triste Draw 30 Federal 3** Cimarex Energy Co. of Colorado Unit O, Section 30 T23S-R33E; Lea County, NM

**RECEIVED** All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:

- A. Characteristics of H<sub>2</sub>S
- B. Physical effects and hazards
- C. Proper use of safety equipment and life support systems.
- D. Principle and operation of H<sub>2</sub>S detectors, warning system and briefing areas.
- E. Evacuation procedure, routes and first aid.
- F. Proper use of 30 minute pressure demand air pack.
- 2 H<sub>2</sub>S Detection and Alarm Systems:
  - A. H<sub>2</sub>S detectors and audio alarm system to be located at bell nipple, end of flow line (mud pit) and on derrick floor or doghouse.
- 3 Windsock and/or wind streamers:
  - A. Windsock at mudpit area should be high enough to be visible.
  - B. Windsock at briefing area should be high enough to be visible.
- 4 Condition Flags and Signs:
  - A. Warning sign on access road to location.
  - B. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H<sub>2</sub>S present in dangerous concentration). Only emergency personnel admitted to location.
- 5 Well control equipment:
  - A. See exhibit "E"

#### 6 Communication:

- A. While working under masks chalkboards will be used for communication.
- B. Hand signals will be used where chalk board is inappropriate.
- C. 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 Drillstem Testing:

No DSTs or cores are planned at this time.

- 8 Drilling contractor supervisor will be required to be familiar with the effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.
- 9 If H<sub>2</sub>S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H<sub>2</sub>S scavengers if necessary.

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# H<sub>2</sub>S Contingency Plan **Triste Draw 30 Federal 3** Cimarex Energy Co. of Colorado Unit O, Section 30 T23S-R33E; Lea County, NM

## **Emergency Procedures**

In the event 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.
- ★ Evacuate any public places encompassed by the 100 ppm ROE.
- $\star$  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 occur during the response.
- ★ Take precautions to avoid personal injury during this operation.
- ★ Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- ☆ Have received training in the:
  - ♦ Detection of H₂S, and
    - Measures for protection against the gas,
    - Equipment used for protection and emergency 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 ( $SO_2$ ). 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.

Common	Chemical	Specific	Threshold	Hazardous	Lethal				
Name	Formula	Gravity	Limit	Limit	Concentration				
Hydrogen Sulfide	H₂S	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				

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

## **Contacting Authorities**

Cimarex Energy Co. of Colorado's personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD 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 including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Cimarex Energy Co. of Colorado's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

H<sub>2</sub>S Contingency Plan Emergency Contacts **Triste Draw 30 Federal 3** Cimarex Energy Co. of Colorado Unit O, Section 30 T23S-R33E; Lea County, NM

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Cimarex Energy Co. of Colorad	lo	800-969-4789		
Co. Office and After-Hours Me				
<u>Key Personnel</u>				
Name	Title	Office		Mobile
Larry Seigrist	Drilling Manager	432-620-1934		580-243-8485
Scott Lucas	Drilling Superintendent			432-894-5572
Roy Shirley	Construction Superintendent			432-634-2136
<u>Artesia</u>				
Ambulance		911		
State Police		575-746-2703		
City Police		575-746-2703		
Sheriff's Office		575-746-9888		
Fire Department	575-746-2701			
Local Emergency Planning (	575-746-2122			
New Mexico Oil Conservati	575-748-1283			
<u>Carlsbad</u>				
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 (	575-887-6544			
US Bureau of Land Manage	575-887-6544			
<u>Santa Fe</u>				
New Mexico Emergency Re	505-476-9600			
New Mexico Emergency Re	505-827-9126			
New Mexico State Emerger	505-476-9635			
National				
National Emergency Respo	800-424-8802			
Medical				
Flight for Life - 4000 24th S	t.; Lubbock, TX	806-743-9911		
erocare - 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		· · · · · · · · · · · · · · · · · · ·
<u>Other</u>				
Boots & Coots IWC		800-256-9688	or	281-931-8884
Cudd Pressure Control		432-699-0139	or	432-563-3356
Halliburton		575-746-2757		
B   Services		575-746-3569		

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## Surface Use Plan **Triste Draw 30 Federal 3** Cimarex Energy Co. of Colorado Unit O, Section 30 T23S-R33E; Lea County, NM

- 1. <u>Existing Roads</u>: Area maps, Exhibit "A" shows the proposed well site as staked. Exhibit "B" is a reproduction of Eddy Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, and Exhibit "C-1" is a well site layout map, showing proposed road to location and existing road. Existing road shown on Exhibits "C," C"-1," will be maintained in a condition equal to or better than current conditions.
  - A. The maximum width of the driving surface will be 15.' The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1' deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.
  - B. From Hwy 128 and lease road go northwest on lease road 4.5 miles to lease road, on lease road go east 0.2 miles to proposed lease road.
- 2. <u>Planned Access Roads</u>: Approx. 1320' of access road will be built from #2 well site (SESW). Well is not in MOA, archeological survey is being conducted.

### 3. Planned Electric Lines:

Cimarex plans to install an overhead electric line from the proposed well to an existing overhead electric line at the Triste Draw 30 Fed #2 wellsite. The proposed electric line would be approximately 1320' in length, 4 - 40' poles, 480 volt, 4 wire, 3 phase. The electric line would exit off the west side of the well location and travel east for approximately 1320' along the access road until it would inercept the existing electric line. The electric line will be routed on the south side of the access road and 10-20' from and parallel to the access road.

#### 4. Location of Existing Wells in a One-Mile Radius - Exhibit A

- A. Water wells None known
- B. Disposal wells None known
- C. Drilling wells None known
- D. Producing wells As shown on Exhibits "A"
- E. Abandoned wells As shown on Exhibits "A"

### 5. Location of Proposed Production Facilities:

If on completion this well is a producer, a tank battery will be used and the necessary production equipment will be installed at the Triste Draw 25 Federal 1 battery. A request for off-lease ROW will be filed for this route. Two (2) 4" buried HP poly lines down existing lease road to carry oil, gas, water to the Triste Draw 25 #1 tank battery approximately 3960' to West. The route of the flowlines will be buried 25' to 35' South of the access road. MAOP 1500 psi anticipated working pressure 200-300 psi. Gas lift will be provided by HP poly line buried in the same trench along access road. A seperate commingle request will be submitted and upon approval allocation will be based on well test.

### 6. Location and Type of Water Supply:

Water will be purchased locally from a commercial source and trucked over the access roads.

### 7. Source of Construction Material:

If possible, native caliche will be obtained from the excavation of drill site. Topsoil will be pushed back from the drill site and existing caliche will be ripped and compacted. Then topsoil will be stockpiled on location as depicted on Exhibit "D" (rig layout). If additional material is needed, it will be purchased from a BLM-approved pit as near as possible to the well location.