HOBBS OCD

SFP 2 0 2012

Double X 25 Federal No. 3 L Cimarex Energy Co. Unit C, Section 25 T24S-R32E, Lea County, NM

Hydrogen Sulfide Drilling Operations Plan

## RECEIVED

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H₂S 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.

Page 3A

SEP 2,5 2012

H<sub>2</sub>S Contingency Plan Double X 25 Federal No. 3 Cimarex Energy Co. Unit C, Section 25 T24S-R32E, 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 H<sub>2</sub>S, 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<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.

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**

Stata Production Company'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. Stata Production Company's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

151

#### H<sub>2</sub>S Contingency Plan Emergency Contacts Double X 25 Federal No. 3 Cimarex Energy Co. Unit C, Section 25 T24S-R32E, Lea County, NM

-

. . .

Scott Lucas 432-894-5572 Roy Shirley 432-634-2136 Sheriff's Departments Eddy County 575-887-1888 Lea County 575-396-3611 New Mexico State Police 575-392-5588 Fire Departments 911 Carlsbad 575-885-3125 Eunice 575-394-2111 Hobbs 575-397-9308 Ial 575-397-9308 Ial 575-395-2221 Lovington 575-396-2359 Hospitals 911 Carlsbad Medical Emergency 575-887-4100 Eunice Medical Emergency 575-394-2112 Hobbs Medical Emergency 575-395-2221 Lovington Medical Emergency 575-393-3612 New Mexico Oil Conservation Division 575-393-6161	Company Office	Office	Mobile
Roy Shirley432-634-2136Sheriff's DepartmentsEddy County575-887-1888Lea County575-396-3611New Mexico State Police575-392-5588Fire Departments911Carlsbad575-885-3125Eunice575-394-2111Hobbs575-394-2111Hobbs575-397-9308Jal575-397-9308JalCarlsbad Medical Emergency575-395-2221Lovington575-394-2112Hospitals911Carlsbad Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-395-2221Lovington Medical Emergency575-395-2221Lovington Medical Emergency575-395-2221Lovington Medical Emergency575-395-2221Lovington Medical Emergency575-393-2612Lovington Medical Emergency575-393-3612Agent NotificationsBureau of Land Management575-393-3612New Mexico Oil Conservation Division </td <td>Larry Seigrist, Drilling Manager</td> <td>432-620-1934</td> <td>580-243-8285</td>	Larry Seigrist, Drilling Manager	432-620-1934	580-243-8285
Sheriff's Departments   Eddy County 575-887-1888   Lea County 575-396-3611   New Mexico State Police 575-392-5588   Fire Departments 911   Carlsbad 575-885-3125   Eunice 575-394-2111   Hobbs 575-395-2221   Lovington 575-395-2221   Lovington 575-396-2359   Hospitals 911   Carlsbad Medical Emergency 575-396-2359   Hobbs Medical Emergency 575-397-9308   Jal Medical Emergency 575-397-393-612   Lovington Medical Emergency 575-393-3612	Scott Lucas		432-894-5572
Eddy County575-887-1888Lea County575-396-3611New Mexico State Police575-392-5588Fire Departments911Carlsbad575-885-3125Eunice575-394-2111Hobbs575-397-9308Jal575-395-2221Lovington575-396-2359Hospitals911Carlsbad Medical Emergency575-887-4100Eunice Medical Emergency575-394-2112Hobbs Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-396-2359Agent Notifications575-393-3612Bureau of Land Management575-393-3612New Mexico Oil Conservation Division575-393-6161	Roy Shirley		432-634-2136
Lea County575-396-3611New Mexico State Police575-392-5588Fire Departments911Carlsbad575-885-3125Eunice575-394-2111Hobbs575-397-9308Jal575-395-2221Lovington575-396-2359Hospitals911Carlsbad Medical Emergency575-394-2112Hobbs Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-393-3612Lovington Medical Emergency575-393-3612New Mexico Oil Conservation Division575-393-6161	Sheriff's Departments		
New Mexico State Police575-392-5588Fire Departments911Carlsbad575-885-3125Eunice575-394-2111Hobbs575-397-9308Jal575-395-2221Lovington575-396-2359Hospitals911Carlsbad Medical Emergency575-394-2112Hobbs Medical Emergency575-394-2112Hobbs Medical Emergency575-394-2112Lovington575-394-2112Hobbs Medical Emergency575-394-2112Hobbs Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-395-2221Lovington Medical Emergency575-395-2221Lovington Medical Emergency575-395-2221Lovington Medical Emergency575-395-2221Lovington Medical Emergency575-395-2221Lovington Medical Emergency575-395-2221Lovington Medical Emergency575-396-2359Agent Notifications575-393-3612Bureau of Land Management575-393-6161	Eddy County	575-887-1888	
Fire Departments911Carlsbad575-885-3125Eunice575-394-2111Hobbs575-397-9308Jal575-395-2221Lovington575-396-2359Hospitals911Carlsbad Medical Emergency575-394-2112Hobbs Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-395-2221Lovington Medical Emergency575-395-2359Agent Notifications575-393-3612Bureau of Land Management575-393-6161	Lea County	575-396-3611	
Carlsbad   575-885-3125     Eunice   575-394-2111     Hobbs   575-397-9308     Jal   575-395-2221     Lovington   575-396-2359     Hospitals   911     Carlsbad Medical Emergency   575-394-2112     Hobbs Medical Emergency   575-394-2359     Hospitals   911     Carlsbad Medical Emergency   575-394-2112     Hobbs Medical Emergency   575-394-2112     Hobbs Medical Emergency   575-397-9308     Jal Medical Emergency   575-397-9308     Jal Medical Emergency   575-397-9308     Jal Medical Emergency   575-395-2221     Lovington Medical Emergency   575-395-2221     Lovington Medical Emergency   575-396-2359     Agent Notifications   575-396-2359     Bureau of Land Management   575-393-3612     New Mexico Oil Conservation Division   575-393-6161	New Mexico State Police	575-392-5588	
Eunice575-394-2111Hobbs575-397-9308Jal575-395-2221Lovington575-396-2359Hospitals911Carlsbad Medical Emergency575-887-4100Eunice Medical Emergency575-394-2112Hobbs Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-396-2359Agent Notifications575-396-2359Bureau of Land Management575-393-3612New Mexico Oll Conservation Division575-393-6161	Fire Departments	911	
Hobbs575-397-9308Jal575-395-2221Lovington575-396-2359Hospitals911Carlsbad Medical Emergency575-887-4100Eunice Medical Emergency575-394-2112Hobbs Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-395-2221Lovington Medical Emergency575-396-2359Agent Notifications575-393-3612Bureau of Land Management575-393-3612New Mexico Oll Conservation Division575-393-6161	Carlsbad	575-885-3125	
Jal575-395-2221Lovington575-396-2359Hospitals911Carlsbad Medical Emergency575-887-4100Eunice Medical Emergency575-394-2112Hobbs Medical Emergency575-397-9308Jal Medical Emergency575-397-9308Jal Medical Emergency575-395-2221Lovington Medical Emergency575-396-2359Agent Notifications575-393-3612Bureau of Land Management575-393-3612New Mexico Oll Conservation Division575-393-6161	Eunice	575-394-2111	
Lovington575-396-2359Hospitals911Carlsbad Medical Emergency575-887-4100Eunice Medical Emergency575-394-2112Hobbs Medical Emergency575-397-9308Jal Medical Emergency575-395-2221Lovington Medical Emergency575-396-2359Agent Notifications575-393-3612Bureau of Land Management575-393-3612New Mexico Oll Conservation Division575-393-6161	Hobbs	575-397-9308	
Hospitals911Carlsbad Medical Emergency575-887-4100Eunice Medical Emergency575-394-2112Hobbs Medical Emergency575-397-9308Jal Medical Emergency575-395-2221Lovington Medical Emergency575-396-2359Agent NotificationsBureau of Land Management575-393-3612New Mexico OII Conservation Division575-393-6161	Jal	575-395-2221	
Carlsbad Medical Emergency575-887-4100Eunice Medical Emergency575-394-2112Hobbs Medical Emergency575-397-9308Jal Medical Emergency575-395-2221Lovington Medical Emergency575-396-2359Agent NotificationsBureau of Land Management575-393-3612New Mexico Oll Conservation Division575-393-6161	Lovington	575-396-2359	
Eunice Medical Emergency 575-394-2112   Hobbs Medical Emergency 575-397-9308   Jal Medical Emergency 575-395-2221   Lovington Medical Emergency 575-396-2359   Agent Notifications 575-393-3612   Bureau of Land Management 575-393-6161	Hospitals	911	······
Hobbs Medical Emergency 575-397-9308   Jal Medical Emergency 575-395-2221   Lovington Medical Emergency 575-396-2359   Agent Notifications 575-393-3612   Bureau of Land Management 575-393-3612   New Mexico OII Conservation Division 575-393-6161	Carlsbad Medical Emergency	575-887-4100	
Jal Medical Emergency 575-395-2221   Lovington Medical Emergency 575-396-2359   Agent Notifications 575-393-3612   Bureau of Land Management 575-393-3612   New Mexico OII Conservation Division 575-393-6161	Eunice Medical Emergency	575-394-2112	
Lovington Medical Emergency 575-396-2359   Agent Notifications 575-393-3612   Bureau of Land Management 575-393-3612   New Mexico Oll Conservation Division 575-393-6161	Hobbs Medical Emergency	575-397-9308	
Agent NotificationsBureau of Land Management575-393-3612New Mexico OII Conservation Division575-393-6161	Jal Medical Emergency	575-395-2221	
Bureau of Land Management575-393-3612New Mexico OII Conservation Division575-393-6161	Lovington Medical Emergency	575-396-2359	1
Bureau of Land Management575-393-3612New Mexico OII Conservation Division575-393-6161			1
New Mexico Oil Conservation Division 575-393-6161	Agent Notifications		
	Bureau of Land Management	575-393-3612	
Mosaic Potash - Carlsbad 575-887-2871	New Mexico OII Conservation Division	575-393-6161	1
	Mosaic Potash - Carlsbad	575-887-2871	

3.7



Exhibit D-1 Interim Reclamation Diagram Double X 25 Federal #3 Cimarex Energy Co. of Colorado 25-24S-32E SHL 330' FNL & 1905' FEL BHL 330' FSL & 1650' FWL Lea County, NM



