

Hydrogen Sulfide Drilling Operations Plan

Double X 25 Federal No. 11H

Cimarex Energy Co.

Unit B, Section 25

T24S-R32E, Lea County, NM

30-025-45416

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
- 2 H₂S Detection and Alarm Systems:
 - A. H₂S 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 (H₂S 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 H₂S has on tubular goods 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.

HOBBS OCD

SEP 19 2013

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H₂S Contingency Plan
Double X 25 Federal No. 11H
Cimarex Energy Co.
Unit B, Section 25
T24S-R32E, Lea County, NM

Emergency Procedures

In the event of a release of gas containing H₂S, 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.
- ★ Be equipped with H₂S 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 (SO₂). 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 H₂S and SO₂

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

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).

H₂S Contingency Plan Emergency Contacts
 Double X 25 Federal No. 11H
 Cimarex Energy Co.
 Unit B, Section 25
 T24S-R32E, Lea County, NM

Company Office

Cimarex Energy Co. of Colorado 800-969-4789
 Co. Office and After-Hours Menu

Key Personnel

Name	Title	Office	Mobile
Doug Park	Drilling Manager	432-620-1934	972-333-1407
Dee Smith	Drilling Super	432-620-1933	972-882-1010
Jim Evans	Drilling Super	432-620-1929	972-465-0564
Roy Shirley	Field Super		432-634-2136

Artesia

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 Committee 575-746-2122
 New Mexico Oil Conservation Division 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
 US Bureau of Land Management 575-887-6544

Santa Fe

New Mexico Emergency Response Commission (Santa Fe) 505-476-9600
 New Mexico Emergency Response Commission (Santa Fe) 24 Hrs 505-827-9126
 New Mexico State Emergency Operations Center 505-476-9635

National

National Emergency 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 281-931-8884
 Cudd Pressure Control 432-699-0139 or 432-563-3356
 Halliburton 575-746-2757
 B.J. Services 575-746-3569

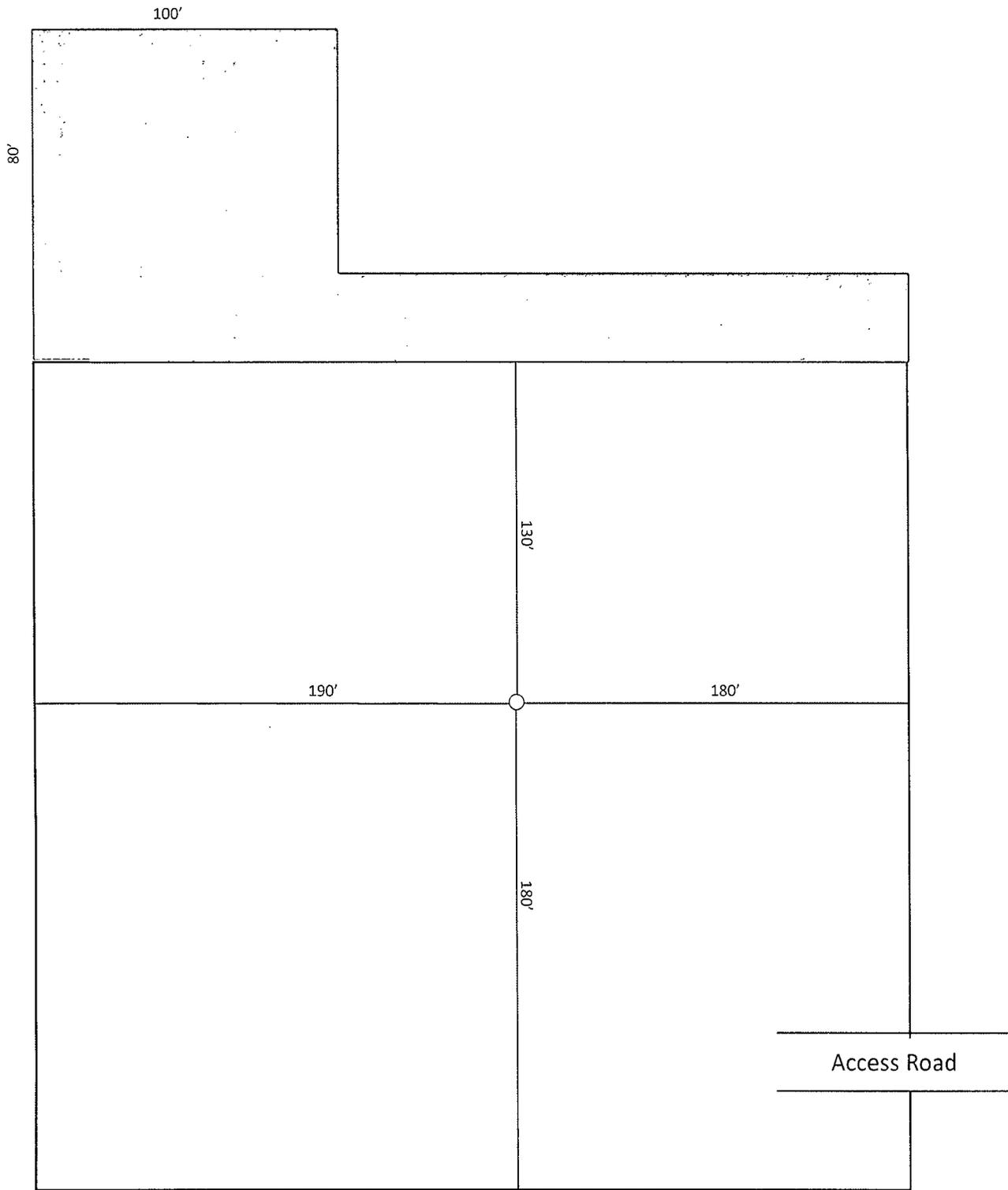


Exhibit "D-1"
Interim Reclamation Plat
Double X 25 Federal 11H
 Cimarex Energy Co.
 25-24S-32E
 SHL 430' FNL & 1990' FEL
 BHL 330' FSL & 1980' FEL
 Lea County, NM

