## Hydrogen Sulfide Drilling Operations Plan

### Independence 8 Federal Com No. 1

### Cimarex Energy Co. of Colorado Unit B, Section 8 T15S-R31E, Chaves County, NM

30-005-29151

- 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.

# H<sub>2</sub>S Contingency Plan Independence 8 Federal Com No. 1

Cimarex Energy Co. of Colorado Unit B, Section 8 T15S-R31E, Chaves 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.
- ★ 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.

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

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

### **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).

### $H_2S$ Contingency Plan Emergency Contacts

### Independence 8 Federal Com No. 1

Cimarex Energy Co. of Colorado Unit B, Section 8

T15S-R31E, Chaves County, NM

Cimarex Energy Co. of Colora	do	800-969-4789		
Co. Office and After-Hours M	enu			
Vou Dorsonnol				
<u>Key Personnel</u> Name	Title	Office		Mobile
	Drilling Manager	972-443-6463		972-333-1407
Doug Park		972-443-6491		972-882-1010
Dee Smith Jim Evans	Drilling Super Drilling Super	972-443-6451		972-465-6564
Roy Shirley		372-443-0431		432-634-2136
koy Sniriey	Field Super			432-034-2130
			IN SUCES	
<u>Artesia</u>		011		
Ambulance		911		
State Police		575-746-2703 575-746-2703		
City Police				
Sheriff's Office		575-746-9888 <b>575-746-2701</b>		
Fire Department	Committee	575-746-2701		
Local Emergency Planning		575-748-1283		
New Mexico Oil Conservat	ion Division	5/5-/46-1265		
Cantalaad				
<u>Carlsbad</u> Ambulance		911		
		575-885-3137		
State Police		575-885-2111		
City Police		575-887-7551		
Sheriff's Office		575-887-3398		
Fire Department	Committee	575-887-6544		
Local Emergency Planning		575-887-6544		
US Bureau of Land Manage	ement	373-887-0344		
Santa Fe				
	esponse Commission (Santa Fe)	505-476-9600		
	esponse Commission (Santa Fe) 24 Hrs	505-827-9126		
New Mexico State Emerge		505-476-9635		
INEW MEXICO State Emerge	ney operations center	303 170 3003		
  National				
	onse Center (Washington, D.C.)	800-424-8802		
8-11-7				
Medical				
Flight for Life - 4000 24th	St.; Lubbock, TX	806-743-9911		
Aerocare - R3, Box 49F; Lu		806-747-8923		
	Yale Blvd S.E., #D3; Albuquerque, NM	505-842-4433		
	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		

# Surface Use Plan

### Independence 8 Federal Com No. 1

Cimarex Energy Co. of Colorado Unit B, Section 8 T15S-R31E, Chaves County, NM

- 1 <u>Existing Roads:</u> Area maps, Exhibit "B" is a reproduction of Eddy Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
  - A. Exhibit "A" shows the proposed well site as staked.
  - B. From mile marker 30 of Hwy 249, go North on lease road for 1.8 miles to proposed location.
- 2 Planned Access Roads: No new roads will be constructed.
- 3 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 Exhibit "A"
  - E. Abandoned wells As shown on Exhibit "A"
- 4 If on completion this well is a producer, Cimarex Energy Co. of Colorado will furnish maps and/or plats showing on site facilities or off site facilities if needed. This will be accompanied by a Sundry Notice.
- 5 Location and Type of Water Supply:

Water will be purchased locally from a commercial source and trucked over the access roads or piped in flexible lines laid on top of the ground.

### 6 Source of Construction Material:

If possible, construction will be obtained from the excavation of drill site. If additional material is needed, it will be purchased from a local source and transported over the access route as shown on Exhibit "C".

# Surface Use Plan Independence 8 Federal Com No. 1

Cimarex Energy Co. of Colorado Unit B, Section 8 T15S-R31E, Chaves County, NM

### 7 Methods of Handling Waste Material:

- A. Drill cuttings will be seperated by a series of solids removal equipment and stored in steel containment pits and then hauled to a state-approved disposal facility.
- B. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by supplier including broken sacks.
- D. Sewage from living quarters will drain into holding tanks and be cleaned out periodically. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.
- E. Drilling fluids will be contained in steel pits in a closed circulating system. Fluids will be cleaned and reused. Water produced during testing will be contained in the steel pits and disposed of at a state approved disposal facility. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.

### 8 Ancillary Facilities:

A. No camps or airstrips to be constructed.

### 9 Well Site Layout:

- A. Exhibit "D" shows location and rig layout.
- C. Mud pits in the closed circulating system will be steel pits and the cuttings will be stored in steel containment pits.
- D. Cuttings will be stored in steel pits until they are hauled to a state-approved disposal facility.
- E. If the well is a producer, those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

### 10 Plans for Restoration of Surface:

Rehabilitation of the location will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be recountoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

# Surface Use Plan Independence 8 Federal Com No. 1 Cimarex Energy Co. of Colorado

Unit B, Section 8 T15S-R31E, Chaves County, NM

### 11 Other Information

- A. Topography consists of a sloping plane with loose tan sands. Vegetation is mainly yucca, mesquite and shin oak.
- B. The wellsite is on surface owned by Department of the Interior, Bureau of Land Management. The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.
- C. An Archaeological survey will be conducted on the location and proposed roads, and this report will be filed with the Bureau of Land Management in the Roswell BLM office.
- D. There are no know dwellings within 1½ miles of this location.

Operator Certification Statement
Independence 8 Federal Com No. 1
Cimarex Energy Co. of Colorado
Unit B, Section 8
T15S-R31E, Chaves County, NM

### Operator's Representative

Cimarex Energy Co. of Colorado 600 N. Marienfeld St., Ste. 600 Midland, TX 79701

Office Phone: 432-571-7800

Zeno Farris

**CERTIFICATION**: I hereby certify that the statements and plans made in this APD are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Cimarex Energy Co. of Colorado and/or its contractors/subcontractors and is in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME:	Zeno Fauris
	Zeno Farris
DATE:	March 24, 2010
TITLE:	Manager Operations Administration

### Form 3160-5 RECEIVED (April 2004)

1. Type of Well

# NAW IVIEXICO THE CORRECTS.

DEP. WENT OF THE INTERIOR 188240 BUREAU OF LAND MODSEM 188240	
DEP. MENT OF THE INTERIOR.	
BUREAU OF LAND MANDSEMENT 88240	

 غالان س	ici	A.	
_			FC

ORM APPROVED

OMB No	1004-0137
Expires Ma	arch 31, 200
an Comal Ma	

3	Lease Seriai No.
SH	L LC-060850, BHL LC-069832-B
6	If Indian, Allottee or Tribe Name

AUG 0 2 2010

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an

HOBBSOCD abandoned well. Use form 3160-3 (APD) for such proposals.

)DDD	
SUBMIT IN TRIPLICATE - Other instructions on reverse side	7. If Unit or CA/Agreement, Name and/or No
	Pending

Oil Well Gas Well Other 2. Name of Operator

Cimarex Energy Co. of Colorado 9. API Well No.

3a. Address 3b. Phone No. (include area code) 30-005-

600 N. Marienfeld St., Ste. 600; Midland, TX 79701 432-571-7800

4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL 510 FNL & 2310 FEL, 8-15S-31E BHL 660 FNL & 330 FEL, 9-15S-31E

10 Field and Pool, or Exploratory Area

Independence 8 Federal Com No. 1

Abo/Wolfcamp Wildcat 11. County or Parish, State

Well Name and No

Chaves County, NM

CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION		TYPE OF ACTION			
	Acidize	Deepen	Production (Start/Resume)	Water Shut-off	
Notice of Intent	Alter Casing	Fracture Treat	Reclamation	Well Integrity	
Subsequent Report	Casing Repair	New Construction	Recomplete	Other Rectify admini-	
Subsequent Report	Change Plans	Plug and Abandon	Temporarily Abandon	stratively deficient APD	
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposal	items	
12 Day 1- Day 1 - O - 1 - 10					

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones Attach the bond under which the work will be performed or provide the Bond No on file with BLM/BIA Required subsequent reports shall be filed within 30 days following completion of the involved operations If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection )

Cimarex's APD for the Independence 8 Federal Com No. 1 was found to be deficient in the following ways:

• Map showing access route: Please see attached revised topo.

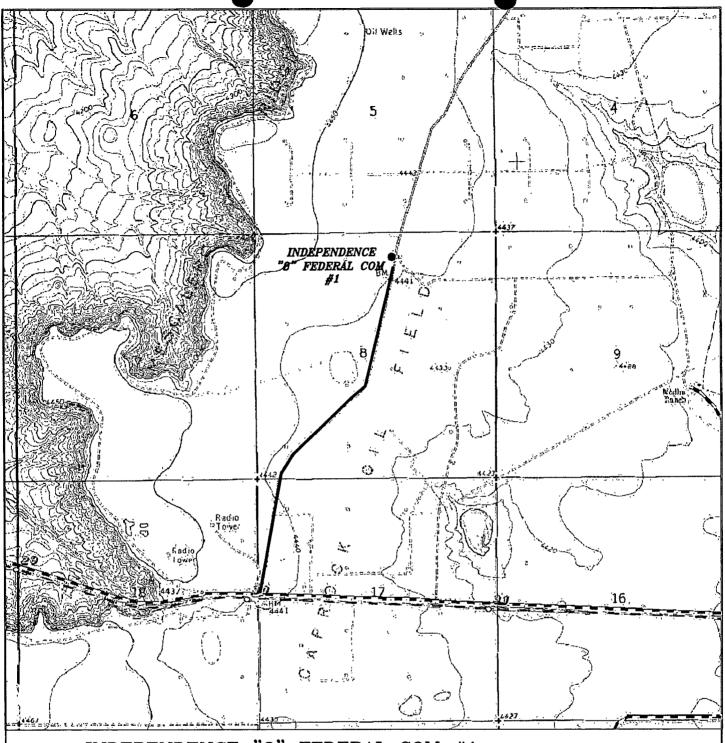
• Interim/Federal Reclamation Plan: Please see attached page for reclamation plans.

ACCEPTED FOR RECORD

14. I hereby certify that the foregoing is true and correct			
Name ( <i>Printed/Typed</i> )  Natalie Krueger	Title	Regulatory	
Signature Natali House	Date	07.08.10	
THIS SPACE FOR FEDER	RAL OR S	TATE OFFICE USE	
Approved by		Title	Date
Conditions of Approval, if any, are attached. Approval of this notice does not warrant of certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office	

Title 18 U.S.C Section 1001 and Title 43 U.S.C. 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)



INDEPENDENCE "8" FEDERAL COM #1
Located 510' FNL and 2310' FEL
Section 8, Township 15 South, Range 31 East,
N.M.P.M., Chaves County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fox basinsurveys.com

W.O. Number: JMS 21628	4
Survey Date: 08-14-2009	\$
Scale: 1" = 2000'	Y
Date: 08-17-2009	

CIMAREX ENERGY CO. OF COLORADO Interim/Federal Reclamation Plans
Independence 8 Federal Com No. 1
Cimarex Energy Co. of Colorado
SHL 510 FNL & 2310 FEL, 8-15S-31E
BHL 660 FNL & 330 FEL, 9-15S-31E
Chaves County, NM

#### Location of Proposed Production Facilities:

If on completion this well is a producer, the necessary production equipment will be installed at the wellsite and a flowline laid along existing road to tank battery at the Independence 8 Federal Com No. 2. Caliche from areas of the pad site not required for operations will be reclaimed. The original topsoil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation. Any changes to the facilities or off-site facilities will be accompanied by a Sundry Notice.

### 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" of APD (rig layout). If additional material is needed, it will be purchased from a BLM-approved pit as near as possible to the well location.

#### Well Site Layout:

- A. Exhibit "D" of APD shows location and rig layout.
- C. Mud pits in the closed circulating system will be steel pits and the cuttings will be stored in steel containment pits.
- D. Cuttings will be stored in steel pits until they are hauled to a state-approved disposal facility.
- E. If the well is a producer, those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

### Plans for Restoration of Surface:

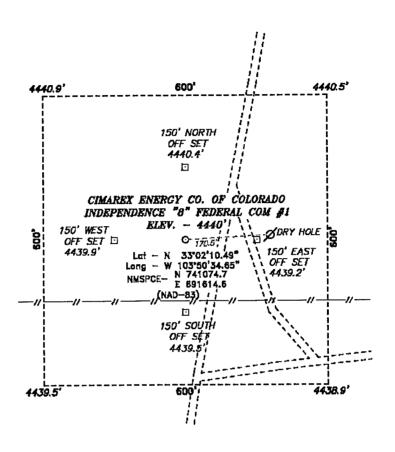
Rehabilitation of the location will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, or at final abandonment, the pad and road area will be recountoured to match the existing terrain. The caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

SECTION 8, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M., CHAVES COUNTY.

NEW MEXICO.



Directions to Location:

FROM MILE MARKER 30 OF HWY 249, CO NORTH ON LEASE ROAD FOR 1.8 MILES TO PROPOSED LOCATION.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 21628 | Drawn By: J. SMALL

Date: 08-17-2009 | Disk: JMS | 21628

200 0 200 400 FEET SCALE: 1" = 200'

## CIMAREX ENERGY CO. OF COLORADO

REF: INDEPENDENCE "8" FEDERAL COM #1 / WELL PAD TOPO

THE INDEPENDENCE "8" FEDERAL COM #1 LOCATED 510'

FROM THE NORTH LINE AND 2310' FROM THE EAST LINE OF

SECTION 8, TOWNSHIP 15 SOUTH, RANGE 31 EAST,

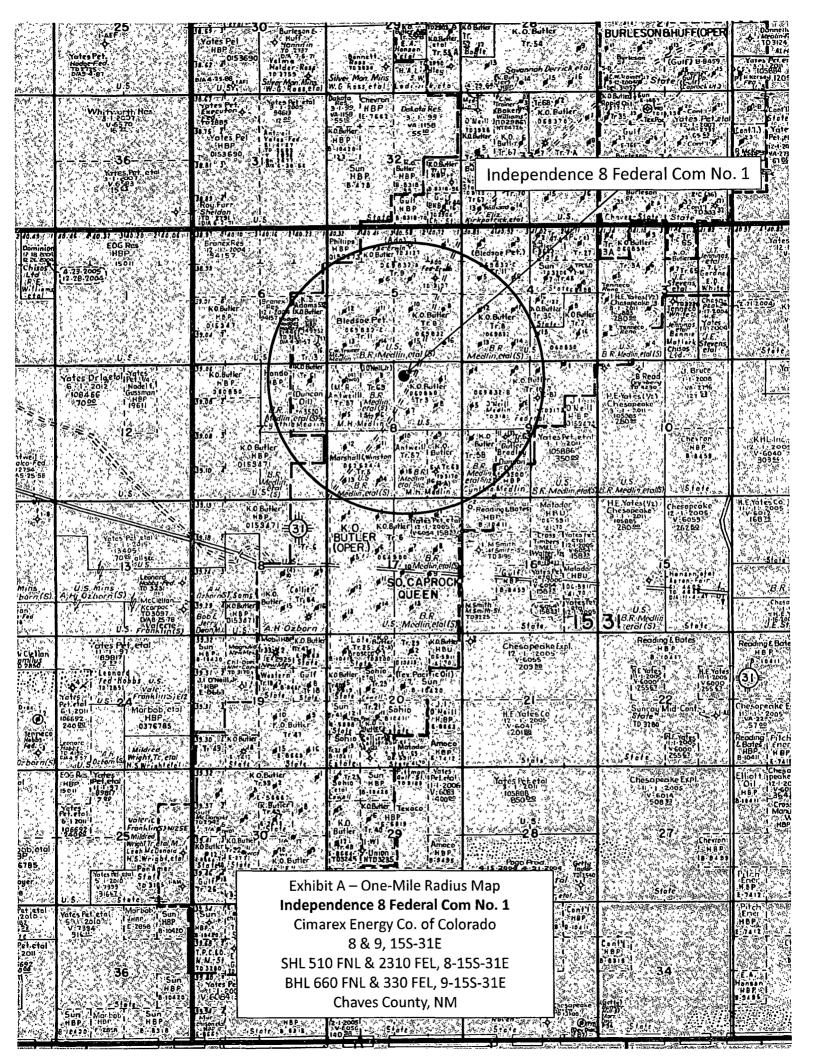
N.M.P.M., CHAVES COUNTY, NEW MEXICO.

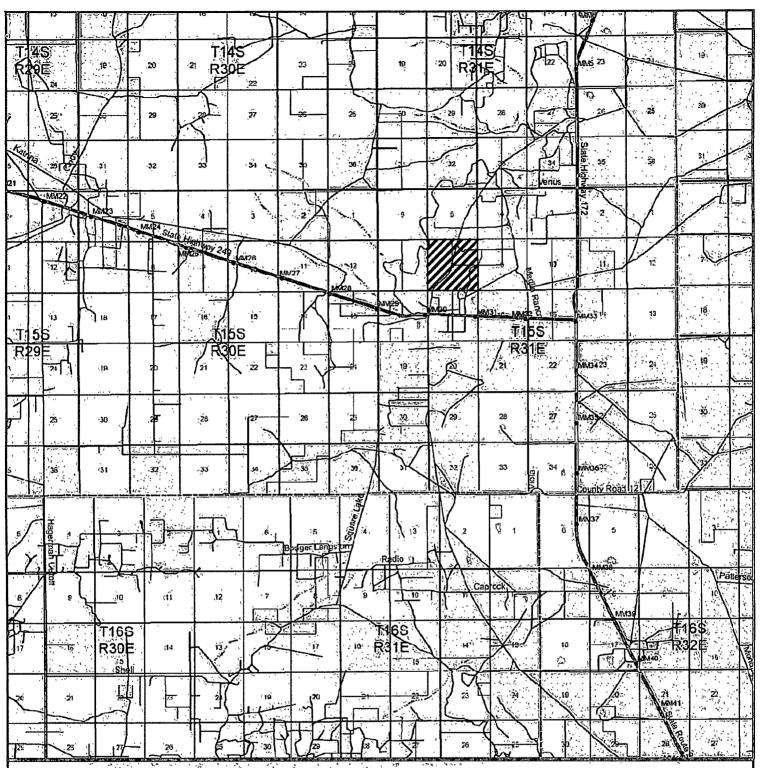
Survey Date: 08-14-2009

Sheet

Sheets

of





INDEPENDENCE "8" FEDERAL COM #1
Located 510' FNL and 2310' FEL
Section 8, Township 15 South, Range 31 East,
N.M.P.M., Chaves County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2208 - Fax basinsurveys.com

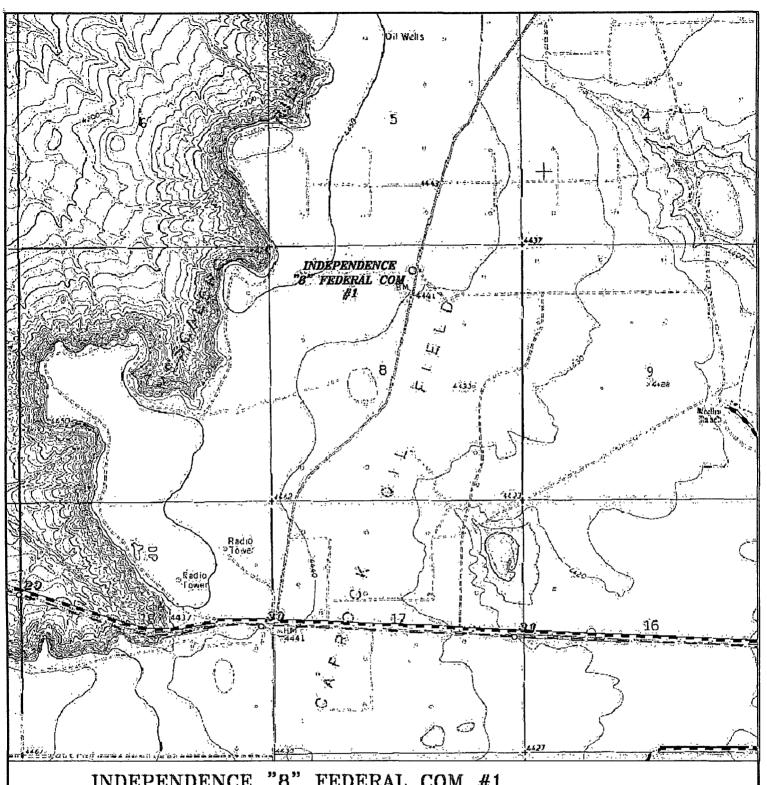
W.O. Number: JMS 21628

Survey Date: 08-14-2009

Scale: 1" = 2 Miles

Date: 08-17-2009

CIMAREX ENERGY CO. OF COLORADO



INDEPENDENCE "8" FEDERAL COM #1
Located 510' FNL and 2310' FEL
Section 8, Township 15 South, Range 31 East,
N.M.P.M., Chaves County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 — Office (575) 392-2206 — Fax basinsurveys.com

W.O. Number: JMS 21628	إ	
Survey Date: 08-14-2009	9	)
Scale: 1" = 2000'	T	J
Date: 08-17-2009		

CIMAREX ENERGY CO. OF COLORADO

# Cactus Rig 122

# Cimarex Energy Co. of Colorado

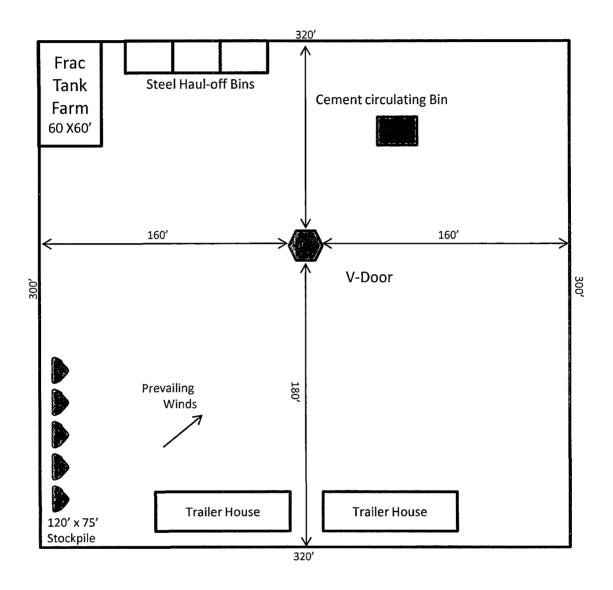


Exhibit D – Rig Layout
Independence 8 Federal Com No. 1
Cimarex Energy Co. of Colorado
8 & 9, 15S-31E
SHL 510 FNL & 2310 FEL, 8-15S-31E
BHL 660 FNL & 330 FEL, 9-15S-31E
Chaves County, NM

