

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
Permit 5814

APPLICATION FOR PERMIT TO DRILL

Operator Name and Address YATES PETROLEUM CORPORATION 105 South Fourth St. Artesia, NM 88210		OGRID Number 25575
		API Number 30-015-33938
Property Code 27525	Property Name LOUISE AYI	Well No. 002

Surface Location

UL or Lot B	Section 25	Township 21S	Range 26E	Lot Idn B	Feet From 990	N/S Line N	Feet From 1550	E/W Line E	County Eddy
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Proposed Pools

BURTON FLAT;MORROW (PRO GAS) 73280

Work Type New Well	Well Type GAS	Cable/Rotary	Lease Type Private	Ground Level Elevation 3167
Multiple N	Proposed Depth 11700	Formation Morrow	Contractor	Spud Date 01/27/2005

Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	600	600	0
Int1	12.25	9.625	36	2350	950	0
Int2	8.75	7	26	8800	600	2200
Prod	6.25	4.5	11.6	11700	1700	8400

Casing/Cement Program: Additional Comments

Yates Petroleum Corporation proposes to drill/test the Morrow and intermediate formations. Approximately 600' of surface casing will be set/cemented to shut off gravel and cavings. If commercial, production casing will be run/cemented; will perforate/stimulate as needed for production. MUD PROGRAM: 0-600' - FW /Spud Mud; 600' - 2350' FW/LCM Sweeps; 2350'-8800' Cut Brine; 8800'-10,000' Brine; 10,000-TD SW Gel/Starch/4% KCL.
--

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Electronically Signed By: Debbie Caffall

Title: Regulatory Technician

Date: 01/26/2005

Phone: 505-748-4364

OIL CONSERVATION DIVISION

Electronically Approved By: Bryan Arrant

Title: Geologist

Approval Date: 02/08/2005

Expiration Date: 02/08/2006

Conditions of Approval:

There are conditions. See Attached.

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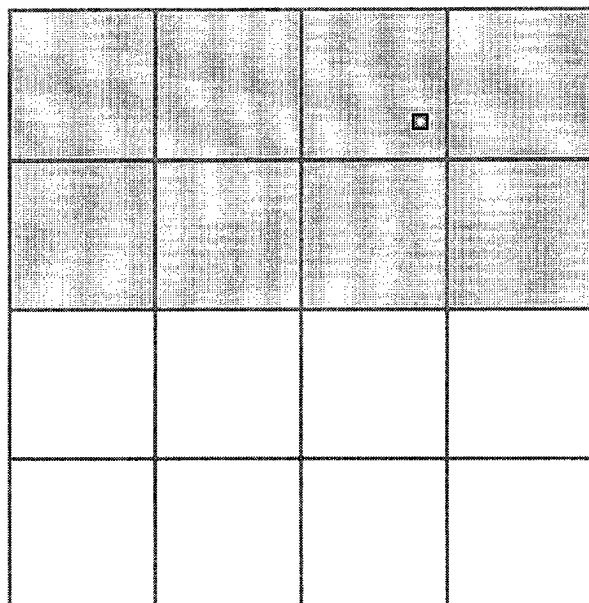
Form C-102
Permit 5814

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-33937	Pool Name BURTON FLAT;MORROW (PRO GAS)	Pool Code 73280
Property Code 27525	Property Name LOUISE AYI	Well No. 002
OGRID No. 25575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3167

Surface And Bottom Hole Location

UL or Lot B	Section 25	Township 21S	Range 26E	Lot Idn B	Feet From 990	N/S Line N	Feet From 1550	E/W Line E	County Eddy
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Electronically Signed By: Debbie Caffall

Title: Regulatory Technician

Date: 01/26/2005

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Surveyed By: Dan Reddy

Date of Survey: 10/28/2004

Certificate Number: 5412

MARTIN YATES, III
1912 - 1985
FRANK W. YATES
1936 - 1986



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (505) 748-1471

S. P. YATES
CHAIRMAN OF THE BOARD
JOHN A. YATES
PRESIDENT
PEYTON YATES
EXECUTIVE VICE PRESIDENT
RANDY G. PATTERSON
SECRETARY
DENNIS G. KINSEY
TREASURER

January 28, 2005

30-015-33938

NMOCD
1301 West Grand
Artesia, NM 88210

RECEIVED

JAN 31 2005

OCD-ARTESIA

Attention: Mr. Bryan Arrant

Re Louise AYI #2
990' FNL and 1550' FEL
Section 25, T21S-R26E
Eddy County, New Mexico

Dear Mr. Arrant:

Please be advised the BOP pipe rams will be function tested on a daily basis and the blind rams will be function tested on all trips due to the close proximity of dwellings as per your request. This of course will follow the NU and testing of the BOPE.

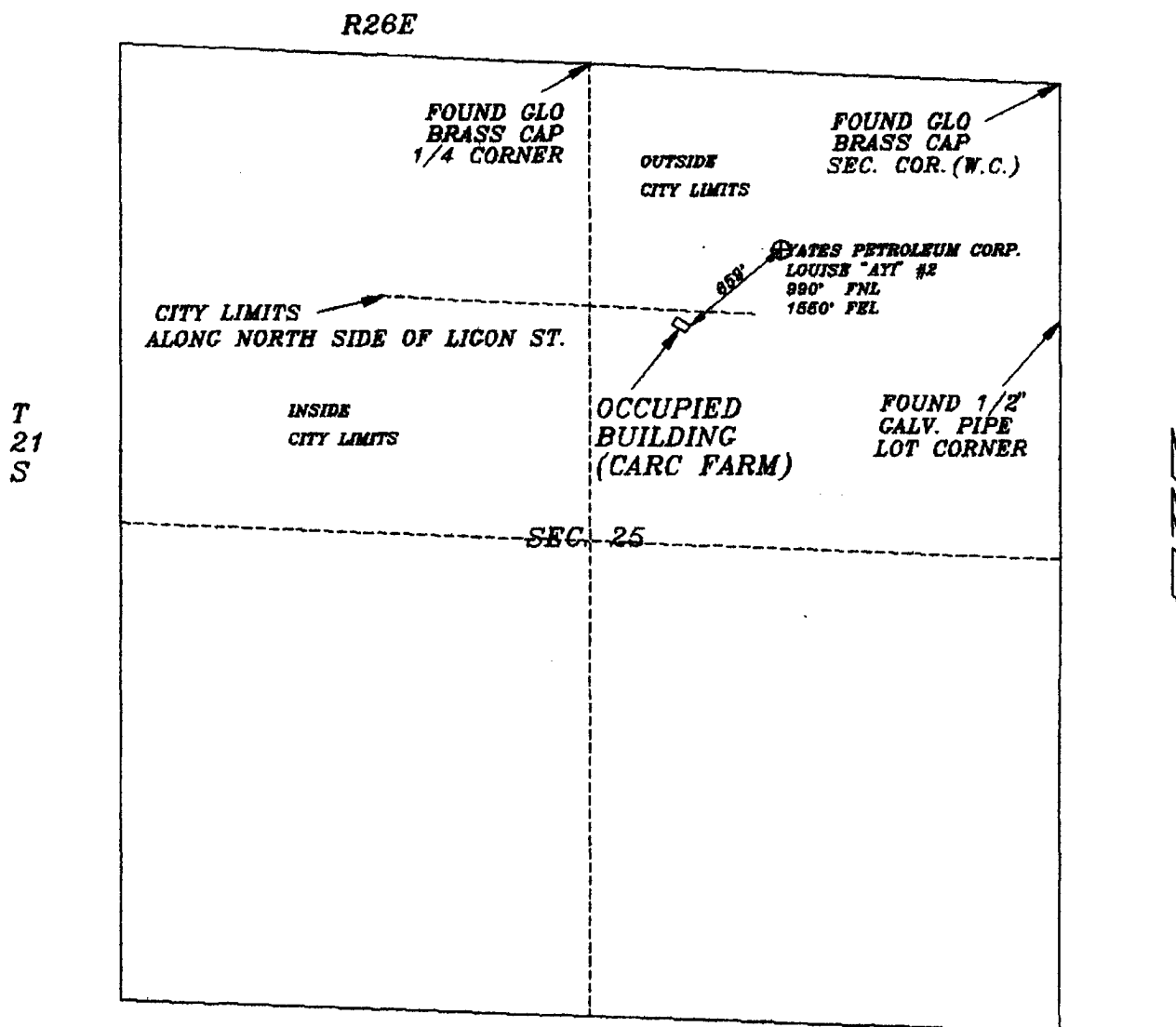
Also, enclosed please find a surveyors plat showing the closest building to our proposed well location is 659 feet away. This is well within county regulations regarding well locations and surrounding dwellings

Thank you.

YATES PETROLEUM CORPORATION

Cy Cowan
Regulatory Agent
/cyc
Enclosure

WELL LOCATION SKETCH



Scale 1" = 1000 ft

PREPARED FOR: YATES PETROLEUM CORP.
 PREPARED BY: DAN R. REDDY NM PE&PS #5412
 SEPT. 10, 2004; REVISED OCT. 28, 2004



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

January 27, 2005
Yates Petroleum Corporation
105 South 4th Street
Artesia, NM 88210
Attn Ms. Debbie Caffal

**RE: Yates Petroleum Corporation: Louise 'AYI' # 2, located in Unit B
(990' FNL & 1550' FEL) of Section 25, Township 21 South Range 26 East Eddy County,
New Mexico.**

Dear Debbie,

In regards to conditions for approval of the above captioned well, the New Mexico Oil Conservation Divisions' (NMOCD) will require the following:

This is for Yates Petroleum Company to take samples from the flow line of the drilling mud every 100' in order to determine the chloride levels from the surface casing setting depth at a projected depth of @ 600' to the projected intermediate casing setting depth of @ 2350'.

The results of this data are to be submitted to the NMOCD.

In addition for conditions of approval of said well, please be aware that the NMOCD will require that the Capitan Reef be drilled with a fresh water mud as stated in your APD.

Please call our office if you have any questions regarding this matter.

Respectfully yours,

Bryan G. Arrant

PES

CC: Tim Gum-District Supervisor-Artesia
Well File

CALLAWAY SAFETY EQUIPMENT CO., INC.
3229 INDUSTRIAL DR.
P.O. BOX 2336
HOBBS, NM 88240
(505) 392-2973

YATES PETROLEUM

Legals
Louise AYI #2
990' FNL, 1550' FEL
Section 25, T21S, R26E
Eddy County, NM

RECEIVED
FEB 08 2005
CCC-ARTESIA

“CONTINGENCY PLAN”

“CONTINGENCY PLAN”

**PREPARED BY:
CALLAWAY SAFETY EQUIPMENT CO., INC.
3229 INDUSTRIAL DR.
HOBBS, NM 88240
(505) 392-2973**

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I. H₂S CONTINGENCY PLAN SECTION

Scope

This contingency plan establishes guidelines for all company employees and contract employees whose work activities may involve exposure to Hydrogen Sulfide gas (H₂S).

Objective

1. Prevent any and all accidents, and prevent the uncontrolled release of H₂S into the atmosphere.
2. Provide proper evacuation procedures to cope with emergencies.
3. Provide immediate and adequate medical attention should an injury occur.

Discussion of Plan

Suspected Problem Zones: **3000ft**

Implementation: This plan, with all details, is to be fully implemented before drilling to the **3000**

Emergency Response Procedure: This section outlines the conditions and denotes steps to be taken in the event of an emergency.

Emergency Equipment and Procedure: This section outlines the safety and emergency equipment that will be required for the drilling of this well.

Training Provisions: This section outlines the training provisions that must be adhered to prior to drilling into the **3000ft** Formation.

Emergency Call Lists: Included are the telephone numbers of all persons that would need to be contacted should an emergency exists.

Briefing: This section deals with the briefing of all people involved in the drilling operation.

Public Safety: Public Safety Personnel will be made aware of the drilling of this well.

CheckLists: Status CheckLists and Procedural CheckLists have been included to insure adherence to the plan.

General Information: A general information section has been included to supply support information.

II. EMERGENCY PROCEDURES SECTION

Emergency Procedures

- I. In the event of any evidence of H₂S level above 10 ppm, take the following steps immediately:
 - A. Secure breathing apparatus.
 - B. Order non-essential personnel out of the danger zone.
 - C. Take steps to determine if the H₂S level can be corrected or suppressed, and if so, proceed with normal operations.
- II. If uncontrollable conditions occur, proceed with the following:
 - A. Take steps to protect and/or remove any public downwind of the rig including partial evacuation or isolation. Notify necessary public safety personnel and the Texas Railroad Commission of the situation.
 - B. Remove all personnel to the Safe Briefing Area.
 - C. Notify public safety personnel for help with maintaining roadblocks and implementing evacuation.
 - D. Determine and proceed with the best possible plan to regain control of the well. Maintain tight security and safety procedures.
- III. Responsibility
 - A. The Company Approved Supervisor shall be responsible for the total implementation of the plan.
 - B. The Company Approved Supervisor shall be in complete command during any emergency.
 - C. The Company Approved Supervisor shall designate a back up Supervisor in the event that he/she is not available.

Emergency Procedure Implementation

- I. Drilling or Tripping
 - A. All Personnel
 - 1. When alarm sounds, don escape unit and report to upwind Safe Briefing Area.
 - 2. Check status of other personnel (buddy system).
 - 3. Secure breathing apparatus.
 - 4. Await orders from Supervisor.
 - B. Drilling Foreman
 - 1. Report to the upwind Safe Briefing Area.
 - 2. Don Breathing Apparatus and return to the point of release with the Tool Pusher or Driller (buddy system).
 - 3. Determine the concentration of H₂S.
 - 4. Assess the situation and take appropriate control measures.

- C. Tool Pusher
 - 1. Report to the upwind Safe Briefing Area.
 - 2. Don Breathing Apparatus and return to the point of release with the Drilling Foreman or Driller (buddy system).
 - 3. Determine the concentration of H₂S.
 - 4. Assess the situation and take appropriate control measures.
- D. Driller
 - 1. Don escape unit.
 - 2. Check monitor for point of release.
 - 3. Report to the Safe Briefing Area.
 - 4. Check the status of other personnel (in a rescue attempt, always use the buddy system).
 - 5. Assign the least essential person to notify the Drilling Foreman and Tool Pusher, in the event of their absence.
 - 6. Assume the responsibility of the Drilling Foreman and Tool Pusher until they arrive, in the event of their absence.
- E. Derrick Man
 - 1. Remain in the Safe Briefing Area until otherwise instructed by Supervisor.
- F. Mud Engineer
 - 1. Report to Safe Briefing Area.
 - 2. When instructed, begin check of mud for pH level and H₂S level.
- G. Safety Personnel
 - 1. Don appropriate breathing apparatus.
 - 2. Check status of all personnel
 - 3. Await instructions from Drilling Foreman or Tool Pusher.
- II. Taking A Kick
 - A. All personnel report to Safe Briefing Area.
 - B. Follow standard BOP procedures.
- III. Open Hole Logging
 - A. All unnecessary personnel should leave the rig floor.
 - B. Drilling Foreman and Safety personnel should monitor the conditions and make necessary safety equipment recommendations.
- IV. Running Casing or Plugging
 - A. Follow "Drilling or Tripping" procedures.
 - B. Assure that all personnel have access to protective equipment.

Simulated Blowout Control Drills

All drills will be initiated by activating alarm devices (air horn). One long blast, on air horn, for ACTUAL and SIMULATED Blowout Control Drills. This operation will be performed by the Drilling Foreman or Tool Pusher at least one time per week for each of the following conditions, with each crew:

- | | |
|---------|---------------------|
| Drill 1 | Bottom Drilling |
| Drill 2 | Tripping Drill Pipe |

In each of these drills, the initial reaction time to shutting in the well shall be timed as well as the total time for the crew to complete its entire pit drill assignment. The times must be recorded on the IADC Driller's Log as "Blowout Control Drill".

Drill No.: _____
Reaction Time to Shut-In: _____ minutes, _____ seconds.
Total Time to Complete Assignment: _____ minutes, _____ seconds.

I. Drill Overviews

- A. Drill No. 1--Bottom Drilling
 1. Sound the alarm immediately.
 2. Stop the rotary and hoist kelly joint above the rotary table.
 3. Stop the circulatory pump.
 4. Close drill pipe rams.
 5. Record casing and drill pipe shut-in pressures and pit volume increases.
- B. Drill No. 2--Tripping Drill Pipe
 1. Sound the alarm immediately.
 2. Position the upper tool joint just above the rotary table and set slips.
 3. Install a full opening valve or inside blowout preventor tool in order to close the drill pipe.
 4. Close the drill pipe rams.
 5. Record the shut-in annular pressure.

II. Crew Assignments

A. Drill No. 1--Bottom Drilling

1. Driller
 - a. Stop the rotary and hoist kelly joint above the rotary table.
 - b. Stop the circulatory pump.
 - c. Check flow.
 - d. If flowing, sound the alarm immediately.
 - e. Record the shut-in drill pipe pressure.
 - f. Record all data reported by the crew.
 - g. Determine the mud weight increase needed or other courses of action.
2. Derrickman
 - a. Open choke line valve at BOP.
 - b. Signal Floor Man #1 at accumulator that choke line is open.
 - c. Close choke and upstream valve after pipe tams have been closed.
 - d. Read the shut-in annular pressure and report readings to Driller.
3. Floor Man #1
 - a. Close the pipe tams after receiving the signal from the Derrickman.
 - b. Report to Driller for further instructions.
4. Floor Man #2
 - a. Notify the Tool Pusher and Operator Representative of the H₂S alarms.
 - b. Check for open fires and, if safe to do so, extinguish them.
 - c. Stop all welding operations.
 - d. Turn-off all non-explosion proof lights and instruments.
 - e. Report to Driller for further instructions.
5. Tool Pusher
 - a. Report to the rig floor.
 - b. Have a meeting with all crews.
 - c. Compile and summarize all information.
 - d. Calculate the proper kill weight.
 - e. Ensure that proper well procedures are put into action.
6. Operator Representative
 - a. Notify the Drilling Superintendent.
 - b. Determine if an emergency exists and if so, activate the contingency plan.

B. Drill No.2--Tripping Pipe

1. Driller
 - a. Sound the alarm immediately when mud volume increase has been detected.
 - b. Position the upper tool joint just above the rotary table and set slips.
 - c. Install a full opening valve or inside blowout preventor tool to close the drill pipe.
 - d. Check flow.
 - e. Record all data reported by the crew.
 - f. Determine the course of action.
2. Derrickman
 - a. Come down out of derrick.
 - b. Notify Tool Pusher and Operator Representative
 - c. Check for open fires and, if safe to do so, extinguish them.
 - d. Stop all welding operations.
 - e. Report to Driller for further instructions.
3. Floor Man #1
 - a. Pick up full opening valve or inside blowout preventors and stab into tool joint above rotary table (with Floor Man #2).
 - b. Tighten valve with back-up tongs.
 - c. Close pipe rams after signal from Floor Man #2.
 - d. Read accumulator pressure and check for possible high pressure fluid leaks in valves or piping.
 - e. Report to Driller for further instructions.
4. Floor Man #2
 - a. Pick-up full opening valve or inside blowout preventors and stab into tool joint above rotary table (with Floor Man #1).
 - b. Position back-up tongs on drill pipe.
 - c. Open choke line valve at BOP.
 - d. Signal Floor Man #1 at accumulator that choke line is open.
 - e. Close choke and upstream valve after pipe rams have been closed.
 - f. Check for leaks on BOP stack and choke manifold.
 - g. Read annular pressure.
 - h. Report readings to the Driller.

5. Tool Pusher
 - a. Report to rig floor.
 - b. Have a meeting with all crews.
 - c. Compile and summarize all information.
 - d. Calculate proper kill weight.
 - e. See that proper well kill procedures are put into action.
6. Operator Representative
 - a. Notify Drilling Superintendent.
 - b. Determine if an emergency exists, and if so, activate the contingency plans.

III. IGNITION PROCEDURES SECTION

Responsibility

The decision to ignite the well is the responsibility of the DRILLING FOREMAN in concurrence with the STATE POLICE. In the event the Drilling Foreman is incapacitated, it becomes the responsibility of the RIG TOOL PUSHER. This decision should be made only as a last resort and in a situation where it is clear that:

1. Human life and property are endangered.
2. There is no hope of controlling the blowout under the prevailing conditions.

If time permits, notify the main office, but do not delay if human life is in danger. Initiate the first phase of the evacuation plan.

Instructions for Igniting the Well

1. Two people are required for the actual igniting operation. Both men must wear self-contained breathing apparatus and attach a safety rope. One man must monitor the atmosphere for explosive gases with the Explosimeter, while the Drilling Foreman is responsible for igniting the well.
2. The primary method to ignite is a 25mm flare gun with a range of approximately 500 feet.
3. Ignite from upwind and do not approach any closer than is warranted.
4. Select the ignition site best suited for protection and which offers an easy escape route.
5. Before igniting, check for the presence of combustible gases.
6. After igniting, continue emergency actions and procedures as before.
7. All unassigned personnel will limit their actions to those directed by the Drilling Foreman.

NOTE: After the well is ignited, burning Hydrogen Sulfide will convert to Sulfur Dioxide, which is also highly toxic. Do not assume the area is safe after the well is ignited.

IV. TRAINING PROGRAM SECTION

Training Requirements

When working in an area where Hydrogen Sulfide gas (H₂S) might be encountered, definite training requirements must be carried out. The Company Supervisor will insure that all personnel, at the well site, have had adequate training in the following:

1. Hazards and characteristics of H₂S.
2. Physical effects of Hydrogen Sulfide on the human body.
3. Toxicity of Hydrogen Sulfide and Sulfur Dioxide.
4. H₂S detection.
5. Emergency rescue.
6. Resuscitators.
7. First aid and artificial resuscitation.
8. The effects of H₂S on metals.
9. Location safety.

Service company personnel and visiting personnel must be notified if the zone contains H₂S, and each service company must provide adequate training and equipment for their employees before they arrive at the well site.

V. EMERGENCY EQUIPMENT SECTION

Emergency Equipment Requirements

- I. Signs
 - A. Located at the location entrance with the following information:
(Lease)
CAUTION-POTENTIAL POISON GAS
HYDROGEN SULFIDE
NO ADMITTANCE WITHOUT AUTHORIZATION
- II. Fresh air breathing equipment
 - A. Air line units for all rig personnel on location.
 - B. Cascade system with hose lines to rig floor and one to the derrick man and other operation areas. Spare cascade (trailer) on location
- III. Wind socks or wind streamers
 - A. Two 10" windsocks located at strategic locations at a height visible from the rig floor.
 - B. Wind streamers (if preferred) to be placed at various locations on the well site to ensure wind consciousness at all times. (Corners of location).
- IV. Hydrogen Sulfide detector and alarms.
 - A. 1-four channel H₂S monitor with alarms.
 - B. 4 sensors located at floor, bell nipple, shale shaker, and pits
 - C. Hand operated detectors with tubes.
 - D. H₂S monitor tester.
- V. Condition sign and flags
 - A. One each of green, yellow, and red condition flags to be displayed to denote conditions:
GREEN--Normal Conditions
YELLOW--Potential Danger
RED--Danger, H₂S Present
 - B. The condition flag shall be posted at the location entrance.
- VI. Auxiliary rescue equipment
 - A. Stretcher
 - B. Two 100' lengths of 5/8" nylon rope.
- VII. * Mud inspection devices
 - A. Garrett Gas Train or Hach Tester for inspection of Hydrogen Sulfide concentration in the mud system.
- VIII. Fire extinguishers
 - A. Adequate fire extinguishers shall be located at strategic locations.

- IX. Blowout prevention equipment
 - A. The well shall have hydraulic BOP equipment for the anticipated BHP.
 - B. Equipment must be tested upon installation.
- X. Combustible gas detectors
 - A. There shall be one combustible gas detector on location at all times.
- XI. BOP testing
 - A. BOP, Choke Line and Kill Line will be tested as specified by operator.
- XII. Audio system
 - A. Radio communication shall be available at the rig.
 - B. Radio communication shall be available at the rig floor or trailer.
 - C. Radio communication shall be available on vehicles.
- XIII. Special control equipment
 - A. Hydraulic BOP equipment with remote control on ground.
 - B. Rotating head at surface casing point.
- XIV. Evacuation Plan
 - A. Evacuation routes should be established prior to spudding each well.
 - B. Should be discussed with all rig personnel.
- XV. Designated Areas
 - A. Parking and visitor area.
 - 1. All vehicles are to be parked at a pre-determined safe distance from the wellhead.
 - 2. Designated smoking area.
 - B. Safe Briefing Area
 - 1. Two Safe Briefing Areas shall be designated on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds or they are at a 180 degree angle if wind directions tend to shift in the area.
 - 2. Personal protective equipment should be stored in both protection centers or if a moveable trailer is used, it should be kept upwind of existing winds. When wind is from the prevailing direction, both protection centers should be accessible.

- *Additional equipment will be available at Callaway Safety Midland, Texas.
- Additional personnel hydrogen sulfide monitors on location for all hands.
- Automatic Flare ignitor installed on rig

VI. CHECK LIST SECTION

Status Check List

Note: Date each item as they are implemented.

1. Sign at location entrance. _____
2. Two (2) wind socks (in required locations). _____
3. Wind streamers (if required). _____
4. 30 minute pressure demand air packs on location
for all rig personnel and mud loggers. _____
5. Air packs, inspected and ready for use. _____
6. Spare bottles for each air pack (if required). _____
7. Cascade system and hose line hook up. _____
8. Cascade system for refilling air bottles. _____
9. Choke manifold hooked-up and tested.
(Before drilling out surface casing.) _____
10. Remote Hydraulic BOP control (hooked-up and
tested before drilling out surface casing.) _____
11. BOP Preventor tested (before drilling out
surface casing.) _____
12. Mud engineer on location with equipment to test
mud for Hydrogen Sulfide. _____
13. Safe Briefing Areas set-up. _____
14. Condition sign and flags on location and ready. _____
15. Hydrogen Sulfide detection system hooked-up. _____
16. Hydrogen Sulfide alarm system hooked-up. _____

17. Stretcher on location at Safe Briefing Area. _____
18. 1-100' length of 5/8" nylon rope on location. _____
19. 1-20 # or 30# ABC fire extinguisher in safety trailer in addition to those on rig. _____
20. Combustible gas detector on location and tested. _____
21. All rig crews and supervisors trained (as required). _____
22. Access restricted for unauthorized personnel. _____
23. Drills on H₂S and well control procedures. _____
24. All outside service contractors advised of potential Hydrogen Sulfide on the well. _____
25. NO SMOKING sign posted. _____
26. Hand operated H₂S detector with tubes on location. _____
27. 25mm flare gun with flares. _____
28. Automatic Flare ignitor installed on rig _____

Procedural Check List

Perform the following on each tour:

1. Check fire extinguishers to see that they have the proper charge.
2. Check breathing equipment to insure that it has not been tampered with.
3. Check pressure on supply air bottles to see that they are capable of recharging.
4. Make sure all of the Hydrogen Sulfide detection systems are operative.

Perform the following each week:

1. Check each piece of breathing equipment to make sure that the demand regulator is working. This requires that the bottle be opened and the mask assembly be put on tight enough so that when you inhale, you get air.
2. Blowout preventor skills.
3. Check supply pressure on BOP accumulator stand-by source.
4. Check all work/escape units for operation: demand regulator, escape bottle air volumes, supply bottle of air volume.
5. Check breathing equipment mask assembly to see that straps are loosened and turned back, ready to put on.
6. Check pressure on breathing equipment air bottles to make sure they are charged to full volume.
7. Check breathing equipment air bottles to make sure all demand regulators are working. This requires that the bottles be opened and the mask assembly be put on tight enough so that when you inhale, you get air.
8. Confirm pressure on all supply air bottles.
9. Perform breathing equipment drills with on-site personnel.
10. Check the following supplies for availability:
 - a. Stretcher
 - b. Safety belts and ropes
 - c. Emergency telephone lists
 - d. Spare air bottles
 - e. Spare oxygen bottles (if resuscitator required)
 - f. Hand operated H₂S detectors and tubes
11. Test the Explosimeter to verify batteries are good.

VII. BRIEFING PROCEDURES SECTION

Briefing Procedures

The following scheduled briefings will be held to ensure the effective drilling and operation of this project:

Pre-Spud Meeting

Date: Prior to spudding the well.

Attendance: Drilling Supervisor
Drilling Engineer
Drilling Foreman
Rig Pushers
Rig Driller
Mud Engineer
All Safety Personnel
Service Companies

Purpose: Review and discuss the well program, step-by-step, to insure complete understanding of assignments and responsibilities.

VIII. EVACUATION PLAN SECTION

General Plan

The direct lines of action prepared by CALLAWAY SAFETY EQUIPMENT CO., INC. to protect the public from hazardous gas situations are as follows:

1. When the company approved supervisor (Drilling Foreman, Tool Pusher, Driller) determine Hydrogen Sulfide gas cannot be limited to the well location, and the public will be involved, he will activate the evacuation plan. Escape routes are noted on the Area Map.
2. Company safety personnel or designee will notify the appropriate local government agency that a hazardous condition exists and evacuation needs to be implemented.
3. Company approved safety personnel that have been trained in the use of Hydrogen Sulfide detection equipment and self-contained breathing equipment will be utilized.
4. Law enforcement personnel (State Police, Local Police Department, Fire Department, and the Sheriff's Department) will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.

NOTE: Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

5. After the discharge of gas has been controlled, "Company" safety personnel will determine when the area is safe for re-entry.

See Emergency Reaction Plan

Emergency Assistance Telephone List

PUBLIC SAFETY

Eddy Co., Sheriff	(505) 746-9888
Fire Dept.	(505) 746-5050
State Police	(505) 622-7200
U.S. Dept. of Labor (OSHA)	(806) 743-7681
OCD	(505) 748-1283

Oil Company Yates Petroleum

Tim Bussel	(505) 748-4221
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Drilling Supt.

SH&E

Safety Contractor

Callaway Safety Equipment	Hobbs	(505) 392-2973
	Odessa	(915) 561-5049
Sam Callaway		(505) 392-1313
Steve Callaway		(505) 392-3910

Affected Public Notification List
(within a 1250' radius of exposure)

The geologic zones that will be encountered during drilling are known to contain hazardous quantities of H₂S. The accompanying map illustrates the affected areas of the community. The residents within this radius will be notified via a hand delivered written notice describing the activities, potential hazards, conditions of evacuation, evacuation drill siren alarms, and other precautionary measures.

Evacuee Description:
Residents

Notification Process:
A continuous siren audible to all residence will be activated, signaling evacuation of previously notified and informed residents.

Evacuation Plan:
All evacuees will migrate lateral to the wind direction.

The Oil Company will identify all home bound or highly susceptible individuals and make special evacuation preparations, interfacing with the local fire and emergency medical service as necessary.

IX. MAPS AND PLATS SECTION

Toxic Effects of Hydrogen Sulfide Poisoning

Hydrogen Sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 20 ppm, which is .002% by volume. Hydrogen Sulfide is heavier than air (specific gravity-1.192) and colorless. It forms an explosive mixture with air between 4.3 and 46.0 percent by volume. Hydrogen Sulfide is almost as toxic as Hydrogen Cyanide and is between five and six times more toxic than Carbon Monoxide. Toxicity data for Hydrogen Sulfide and various other gases are compared below in Table I. Physical effects at various Hydrogen Sulfide levels are shown in Table II.

Table I
Toxicity of Various Gases

Common Name	Chemical Formula	Specific Gravity	Threshold Limit (A)	Hazardous Limit (B)	Lethal Concentration (C)
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm/hr	300 ppm
Hydrogen Sulfide	H ₂ S	1.18	10 ppm (D) 20 ppm (E)	250 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21	5 ppm		1000 ppm
Chlorine	CL ₂	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO ₂	1.52	5000 ppm	5%	10%
Methane	CH ₄	0.55	90,000 ppm (9%)	Combustible above 5% in air	

A. Threshold Limit--Concentration at which it is believed that all workers may be repeatedly exposed day after day without adverse effects.

B. Hazardous Limit--Concentration that may cause death.

C. Lethal Concentration--Concentration that will cause death with short-term exposure.

D. Threshold Limit--10 ppm, 1972 ACGIH (American Conference of Governmental Industrial Hygienists)

E. Threshold Limit--20 ppm, 1966 ANSI acceptable ceiling concentration for eight-hour exposure (based on 40-hour week) is 20 ppm. OSHA Rules and Regulations (Federal Register, Volume 37, No. 202, Part II, dated 10/18/72).

Table II
Physical Effects of Hydrogen Sulfide

Percent %	ppm	Physical Effects
0.001	10	Obvious and unpleasant odor.
0.002	20	Safe for 8 hrs. exposure
0.01	100	Kills smell in 3 to 5 minutes; may sting eyes and throat.
0.02	200	Kills smell shortly; stings eyes and throat.
0.03	300	IDLH (Immediately Dangerous to Life & Health)
Level.		
0.05	500	Dizziness; breathing ceases in a few minutes
0.07	700	Unconscious quickly; death will result if not rescued.
0.10	1000	Unconscious at once; followed by death within minutes.

*Caution: Hydrogen Sulfide is a colorless and transparent gas and is highly flammable. It is heavier than air and may accumulate in low places.

Use of Self-Contained Breathing Apparatus

- I. Written procedures shall be prepared covering safe use of respirators in dangerous atmospheric situations which might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available respirators.
- II. Respirators shall be inspected frequently, at random, to insure that they are properly used, cleaned, and maintained.
- III. Anyone who may use respirators shall be trained in how to properly seal the face piece. They shall wear respirators in normal air and then in a test atmosphere. (Note: Such items as facial hair (beard or sideburns) and eyeglass temple pieces will not allow a proper seal.) Anyone that may be expected to wear respirators should have these items removed before entering a toxic atmosphere. A special mask must be obtained for anyone who must wear eyeglasses. Contact lenses should not be allowed.
- IV. Maintenance and care of respirators
 - A. A program of maintenance and care of respirators shall include the following:
 - 1. Inspection for defects, including leak checks.
 - 2. Cleaning and disinfecting.
 - 3. Repair.
 - 4. Storage.
 - B. Inspection: Self-Contained Breathing Apparatus for emergency use shall be inspected monthly, and records maintained, for the following:
 - 1. Fully charged cylinders.
 - 2. Regulator and warning device operation.
 - 3. Condition of face piece and connection.
 - 4. Elastomer or rubber parts shall be stretched or massaged to keep them pliable and prevent deterioration.
 - C. Routinely used respirators shall be collected, cleaned, and disinfected as frequently as necessary to insure proper protection is provided.
- V. Persons assigned tasks that require the use of Self-Contained Breathing Equipment shall be certified physically fit for breathing equipment usage by the local company physician at least annually.
- VI. Respirators should be worn during the following conditions:
 - A. Any employee who works near the top or on the top of any tank unless tests reveal less than 20 ppm of H₂S.
 - B. When breaking out any line where H₂S can reasonably be expected.
 - C. When sampling air in areas to determine if toxic concentrations of H₂S exist.
 - D. When working in areas where over 20 ppm H₂S has been detected.
 - E. At any time where there is a doubt as to the H₂S level in the area to be entered.

Yates Petroleum Corporation

**105 S. Fourth Street
Artesia, NM 88210**

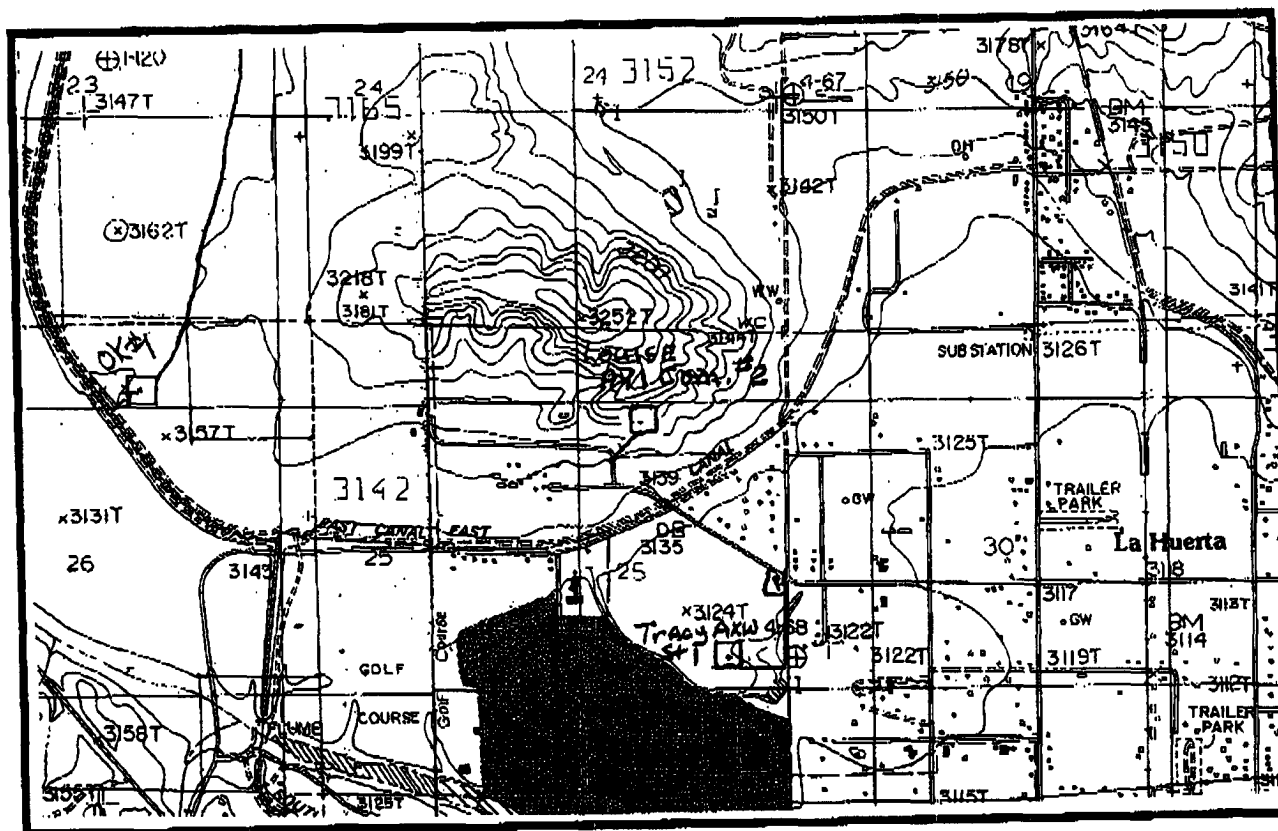
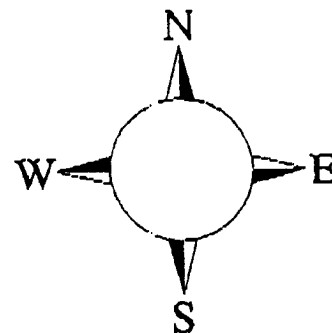
Hydrogen Sulfide (H₂S) Contingency Plan

For

**Louise AYI #2
990' FNL, 1550' FEL
Sec-25 T-21S, R-26E
Eddy County NM**

Louise AYI #2 Location

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.



Tracy AXW 458
3124T
3122T
3119T
3114T
3112T
3110T
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3006T
3004T
3002T
3000T

Yates Petroleum Corporation Phone Numbers

YPC Office (505) 748-1471
 Pinson McWhorter/Operations Manager (505) 748-4189
 Darrel Atkins/Production Manager (505) 748-4204
 Ron Beasley/Prod Superintendent (505) 748-4210
 Al Springer/Drilling (505) 748-4225
 Paul Hanes/Prod. Foreman/Roswell (505) 624-2805
 Jim Krogman/Drilling Superintendent (505) 748-4215
 Artesia Answering Service (505) 748-4302
 (During non-office hours)

Agency Call List**Eddy County (505)****Artesia**

State Police 746-2703
 City Police 746-2703
 Sheriff's Office 746-9888
 Ambulance 911
 Fire Department 746-2701
 LEPC (Local Emergency Planning Committee) 746-2122
 NMOCD 748-1283

Carlsbad

State Police 885-3137
 City Police 885-2111
 Sheriff's Office 887-7551
 Ambulance 911
 Fire Department 885-2111
 LEPC (Local Emergency Planning Committee) 887-3798
 US Bureau of Land Management 887-6544

New Mexico Emergency Response Commission (Santa Fe) (505) 476-9600
 24 HR (505) 827-9126
 New Mexico State Emergency Operations Center (505) 476-9635
 National Emergency Response Center (Washington, DC) ... (800) 424-8802

Other

Boots & Coots IWC 1-800-256-9688 or (281) 931-8884
 Cudd Pressure Control (915) 699-0139 or (915) 563-3356
 Halliburton (505) 746-2757
 B. J. Services (505) 746-3569
 Flight For Life -4000 24th St, Lubbock, TX (806) 743-9911
 Aerocare -Rr 3 Box 49f, Lubbock, TX (806) 747-8923
 Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM (505) 842-4433
 S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM (505) 842-4949

Emergency Procedures

In the case of a release of gas containing H_2S , the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H_2S , measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H_2S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries during the 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

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	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

YPC personnel must liaison 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. The following call list of essential and potential responders has been prepared for use during a release. YPC Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)