

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work ☒ DRILL ☐ REENTER
1b. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator

BP AMERICA PRODUCTION COMPANY

3a. Address

P. O. BOX 3092, RM 6.115, HOUSTON, TX 77253

3b. Phone No. (include area code)

281-366-2052

4. Location of Well (Report location clearly and in accordance with any State requirements)*

At surface 2055' FNL & 1015' FEL

At proposed prod. zone

SAME AS ABOVE

14. Distance in miles and direction from nearest town or post office*

1.5 MILES NORTH OF LOCO HILLS, NM.

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drg. unit line, if any)

1015' FEL

16. No. of Acres in lease

320

17. Spacing Unit dedicated to this well

320

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

N/A

19. Proposed Depth

11,300'

20. BLM/BIA Bond No. on file

WY2924

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

3671' GL

22. Approximate date work will start*

SEPTEMBER 25, 2005

23. Estimated duration

45 DAYS

24. Attachments

ROSWELL CONTROLLED WATER BASIN

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Name (Printed/Typed)

Date

SUE SELLERS

08/15/05

Title

REGULATORY STAFF ASSISTANT

Approved by (Signautre)

/s/ Joe G. Lara

Name (Printed/Typed)

/s/ Joe G. Lara

Date

SEP 15 2005

Title

ACTING FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Application approval does not warrant or 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.

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 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)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Witness Surface Casing

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

NM 88240
Drafter DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 80320	Pool Name
Property Code	Property Name GOLDFISH FED. 17	Well Number 1
OGRID No. 778	Operator Name BP AMERICA PRODUCTION COMPANY	Elevation 3671'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	17	17 S	30 E		2055	NORTH	1015	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 320 AC.	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>NOTE:</p> <p>1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.</p>									

320 AC.

2055'

3673.2'

3672.3'

3673.1'

3673.9'

1015'

Plane Coordinate
X = 605,958.9
Y = 668,034.3

OPERATOR CERTIFICATION

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

Sue Sellers
Signature
Sue Sellers
Printed Name
Regulatory Asst.
Title
August 15, 2005
Date

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.

July 11, 2005
Date Surveyed
Signature & Seal of Professional Surveyor
W.O. Num. 2005-0657
Certificate No. MACON McDONALD 12185

**Attachment to BLM Form 3160-1:
Proposed Drilling Plan**

Well Name:	Goldfish Federal 17 #1
Surface / Bottom Hole Location	Section: 17, Township: 17S, Range: 30E 2055' FNL and 1015' FEL
County, State	Eddy County, New Mexico
NM State Plane East Coordinates	X: 605,958.9 Y: 668,034.3
Ground Elevation	3671'
Latitude / Longitude (NAD 27)	32°50'09.73 N / 103°59'18.09"
Proposed Depth:	11,250' MD / TVD (Vertical Well)

1. Surface Geological Formation:

Rustler @ 250' (Sand and Anhydrite)

2. Estimated Tops of Geological Markers:

Formation	Estimated Top (MD/ TVD)
Yates	1,104'
Seven Rivers	1,370'
Queen	1,985'
San Andres	2,713'
Glorietta	4,185'
Abo	6,395'
Wolfcamp	7,815'
Cisco	8,680'
Strawn	10,265'
Atoka	10,500'
Morrow	10,900'
Lower Morrow	11,060'
Mississippian	11,150'
TD	11,250'

3. Estimated Tops of Possible Water, Oil, Gas or Mineral:

Formation	Estimated Top (MD/ TVD)	Hydrocarbon
Queen	1,985'	Oil
Glorietta	4,185'	Oil
Abo	6,395'	Oil
Atoka	10,500'	GAS
Morrow	10,900'	GAS
Lower Morrow	11,060'	GAS

4. Pressure Control Equipment:

Interval, (MD/TVD)	Pressure Control Equipment
0' – 500'	No Pressure Control Required
400' – TD (11,250' MD/TVD)	5M psi double ram preventer and 5M psi annular preventer

5. Proposed Casing and Cementing Program:

Casing	Hole Size	Interval MD (open hole)	Casing Size	Weight / Grade	Cement Sx / type
Surface	17 ½"	0 – 500'	13 3/8"	48 # / H-40	300 sx – class "C"
Intermediate	11"	500' – 4,230'	8 5/8"	32# / J-55	700 sx (400 sx lead 11.9 ppg) / 300 sx (tail 14.8 ppg)
Production	7 7/8"	4,230' – 11,250'	5 ½"	17# / P-110	600 sx : (2 stage job) class H – Poz mix

WITNESS

Note: All casing will be run back to surface. Actual volume of cement for the Production Interval will be based on the caliper log.

6. Mud Program:

Depth	Mud Type	Weight	Funnel Vis.	Water Loss
0' – 500'	Spud Mud	8.4	29 - 34	NC
500' – 4230'	Brine	9.3	28 - 30	NC
4,230' - 7,800'	Fresh Water	8.5 – 9.0	28 - 29	NC
7,800' – 11,250'	Cut Brine	9.1 – 9.7	34 - 44	8 – 10 cc

7. Auxiliary Equipment:

Upper Kelly Cock, Lower Kelly Cock, and Full Opening Stabbing Valve

8. Evaluation: Testing, Coring and Logging Program:

Evaluation Program		Interval
Open Hole Logs	GR, Density Neutron, Laterolog	4,230' to TD (11,250')
Mud Log	10' dry samples	4,230' to TD (11,250')
Samples	Possible Sidewall Samples	Morrow Formation (10,900')
Cased Hole Logs	Possible Temperature log and or CBL	As needed at casing points.
DST	None Planned	
Conventional Cores	None Planned	

9. Anticipated Abnormal Temperature, Pressure, or Hazards:

All zones are expected to be normal pressured. No anticipated abnormal hazards were found when reviewing the offset well records.

10. Anticipated Starting Date and Duration of Operations:

The Notice to Stake was filed for the surface location (5/12/05) and surveyed on 7/11/05. Pending permit approval, construction work on this location would begin in late August of 2005. The planned spud date is late September 2005.

**Attachment to BLM Form 3160-1:
Proposed Surface Use Plan**

Well Name:	Goldfish Federal 17 #1
Surface / Bottom Hole Location	Section: 17, Township: 17S, Range: 30E 2055' FNL and 1015' FEL
County, State	Eddy County, New Mexico
NM State Plane East Coordinates	X: 605,958.9 Y: 668,034.3
Ground Elevation	3671'
Latitude / Longitude (NAD 27)	32°50'09.73" N / 103°59'18.09"
Proposed Depth:	11,250' MD / TVD (Vertical Well)

1. Directions to locations from Existing Roads:

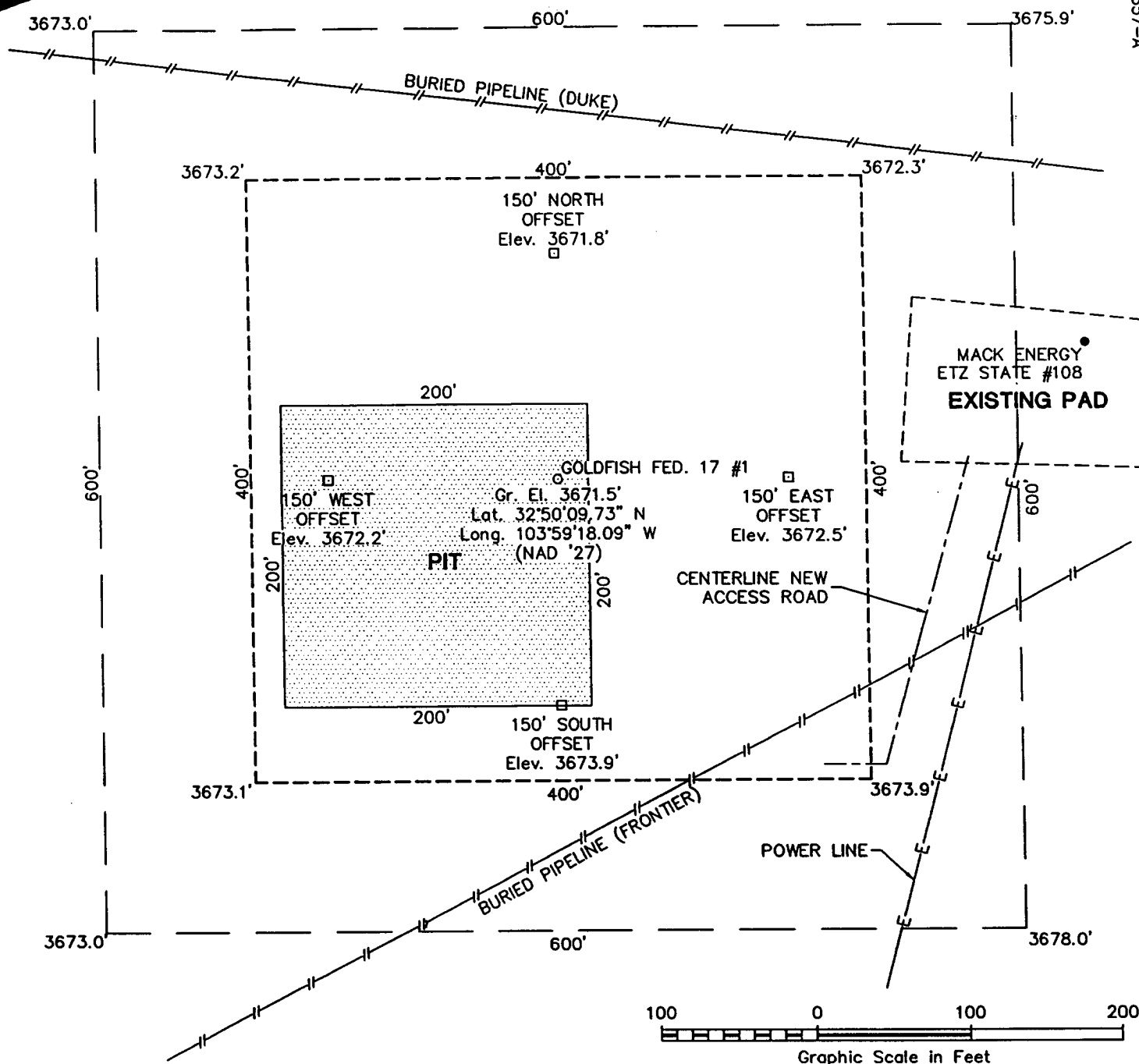
From the intersection of US HWY 82 and CR 217 in Loco Hills, New Mexico. Go North on said CR 217 (1.2 miles) to a lease road on the west side of the road (left) then go west on said lease road (0.1 miles) to the Mack Energy ETZ State #108 well, being approximately 350' east of the proposed location.

2. Planned Access Roads:

251' of new access road coming from the existing well location for the Mack Energy ETZ State #108 well to the Southeast corner of the proposed Goldfish Federal 17 #1 location (see attached drawing). ?

3. Location of Existing Wells:

The attached location verification map map shows the existing wells in the surrounding 3 mile area.

**DRIVING DIRECTIONS**

FROM THE INTERSECTION OF U.S. HIGHWAY 82 AND COUNTY ROAD 217 IN LOCO HILLS, NM GO NORTH ON SAID COUNTY ROAD 217 1.2 MILES TO A LEASE ROAD ON WEST (LEFT) SIDE OF ROAD, THEN GO WEST ON SAID LEASE ROAD 0.1 MILE TO THE MACK ENERGY, ETZ STATE #108 WELL, BEING APPROXIMATELY 350 FEET EAST OF THE PROPOSED LOCATION.

BP AMERICA PRODUCTION COMPANY**GOLDFISH FED. 17 #1**

Located 2055' FNL & 1015' FEL, Section 17
Township 17 South, Range 30 East, N.M.P.M.
Eddy County, New Mexico

Drawn By: LVA

Date: July 14, 2005

Scale: 1"=100'

Field Book: 303 / 42-44

Revision Date:

Quadrangle: Loco Hills

W.O. No: 2005-0657

Dwg. No.: L-2005-0657-A



110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 - (432) 687-0868 FAX

Goldfish Federal 17 Well #1 Drilling Procedure Summary

1. Mobilize Nabors 399 to location. Rig up.
2. Drill 17 1/2" Surface hole to 500' md / tvd.
3. Run and cement 13 3/8" surface casing to surface.
4. Nipple up MBS wellhead and 13-5/8" 5M BOP stack
5. Test 13 5/8" 5M BOP stack, 5000 psi (rams) & 3500 psi (hydrill).
6. Test 13 3/8" casing to 1000 psi, hold 30 minutes.
7. Drill 11" hole to 4,230' md / tvd
8. Run and cement 8 5/8" intermediate casing to surface
9. Land 8 5/8" casing in MBS wellhead.
10. Test 8 5/8" casing to 2500 psi, hold 30 minutes.
11. Drill 7 7/8" hole to 11,250' md / tvd.
12. Run wireline logs from $\pm 4,230'$ to TD.
13. Run and cement 5 1/2" Production casing, TOC $\pm 4000'$.
14. Nipple Down BOP&E
15. Install dry hole tree.
16. Move Drilling Rig Off location.

Note:

- A separate permit for completion will be filed.

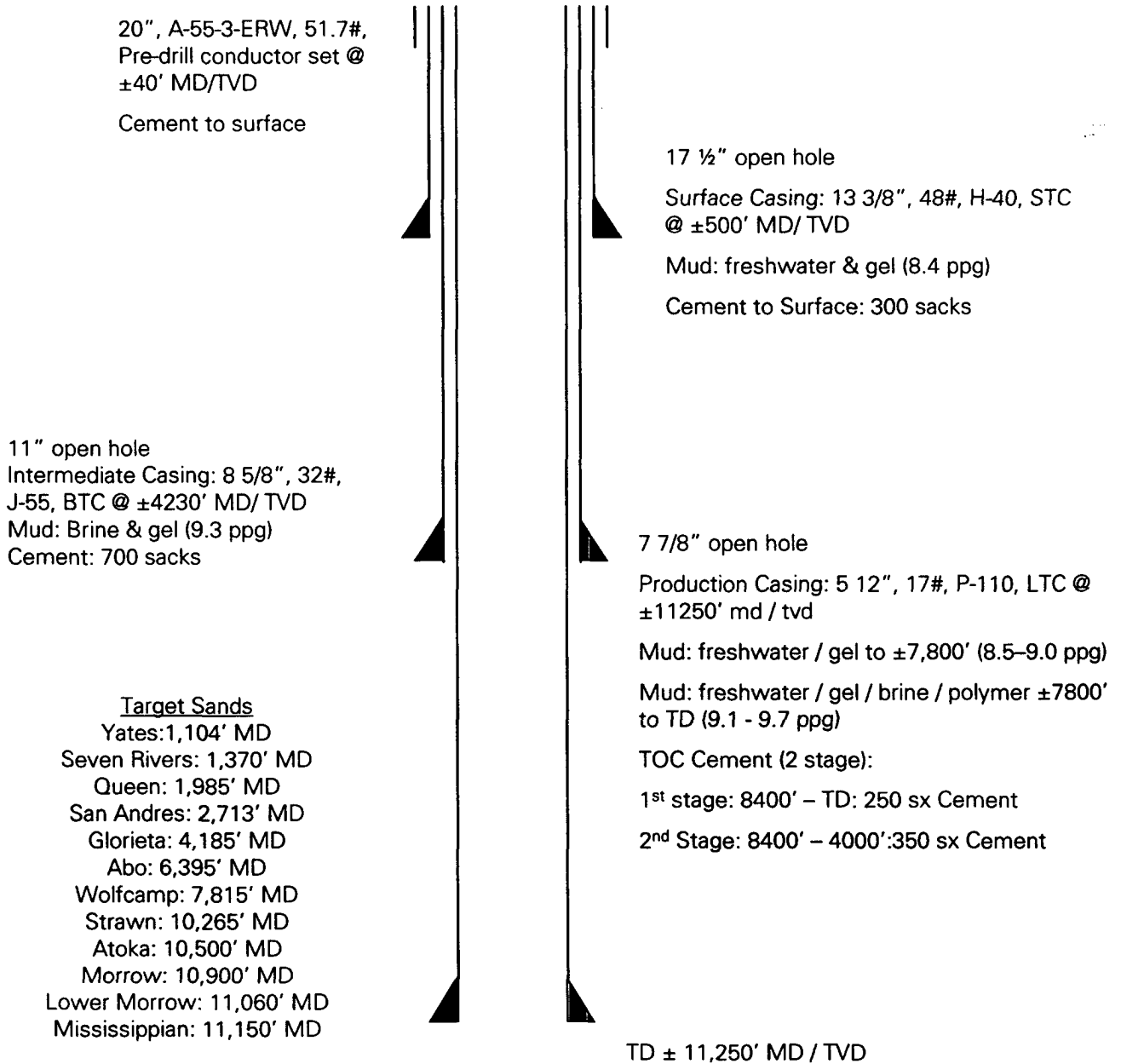
Goldfish Federal 17 #1

Eddy County, New Mexico
Section 17, T17S, R30E N.M.P.M
2055' FNL & 1015' FEL

Proposed Casing Design

(not to scale)

GL Elevation: 3671'
Estimated RKB: 3686'



8/9/05

Blowout Prevention and Testing Program

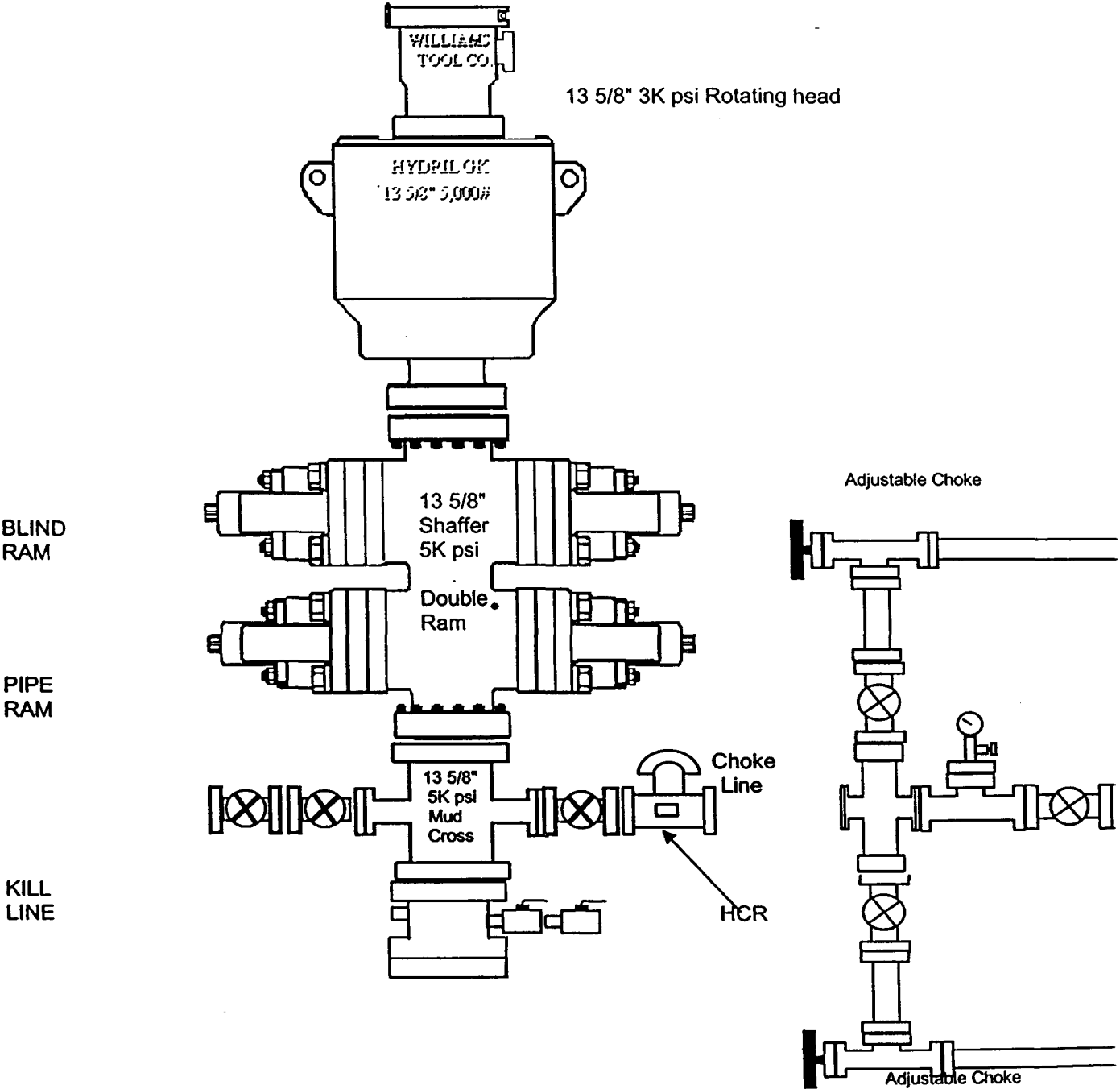
1. Testing BOP's

- Prior to any pressure testing, the area shall be isolated. Personnel shall be notified and / or evacuated.
- All pressure tests shall include a low-pressure test (200 – 300 psi) for 5 minutes before proceeding to the full pressure test.
- A satisfactory pressure test is represented by the test pressure held for a minimum of 5 minutes after the pressure has stabilized.
- The stack will be pressure tested when nipped up.
- The BOP's will be pressure and fully function tested every 30 days.
- Annular will be function tested once a week by closing around a joint of drill pipe.
- Pipe rams will be function tested every trip out of the hole.
- All wellhead components and pressure containing connections will be pressure tested upon installation and re-tested on the connection break when changing out rams, any stack repair or installation of spools and section pieces in the wellhead.

2. Drilling Practices:

- All drilling breaks shall be flow checked and reported.
- Prior to tripping out of the hole, the drilling fluid shall be circulated and flow checked before pulling off bottom.
- Flow check well on trips out of the hole at (a) after pulling into the casing shoe and (B) before the BHA enters the stack.
- Hole fill-up volumes shall be monitored on every trip in and out of the hole. Any deviation from expected hole fill-up volumes shall be investigated.
- Slow pump pressures with both pumps should be taken:
 - Once a day when drilling
 - Mud weight Increases
 - BHA changes
 - Prior to drilling out casing.

Blow Out Preventer Stack Arrangement
Nabors Drilling: Rig #399: Revised 5/9/05



BP America Production Company

Legals:

Goldfish 17 Federal #1

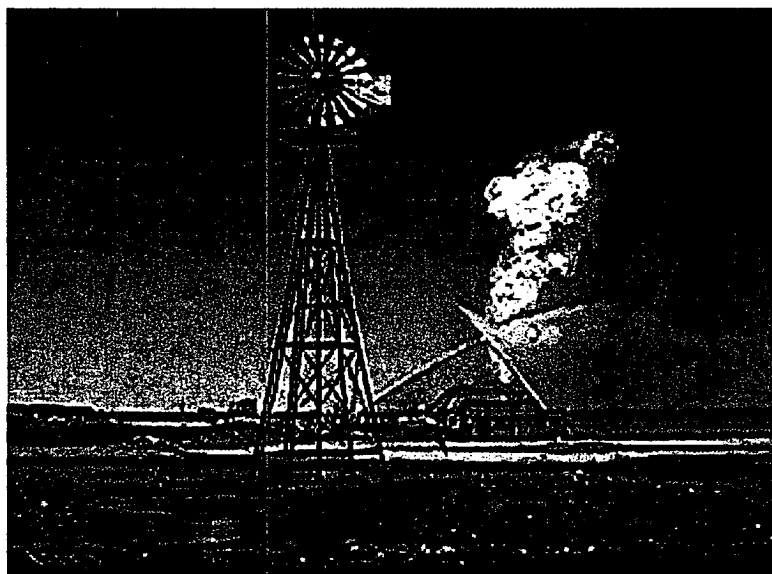
2055' FNL & 1015' FEL

Section – 17, Township – 17S, R – 30E

West Company of Midland, Inc. Survey

N.M.P.M. Eddy County, New Mexico

“CONTINGENCY PLAN”



CALLAWAY SAFETY EQUIPMENT CO. INC.

**11020 W. Hwy. 80 East
Odessa, Texas 79765**

(432) 561-5049

3229 Industrial Drive

Hobbs, New Mexico 88240

(505) 392-2973

(877) 422-6345

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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: San Andres & Cisco Reef

Implementation: This plan, with all details, is to be fully implemented before drilling to the San Andres & Cisco Reef

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 San Andres & Cisco Reef Formations.

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 Check Lists and Procedural Check Lists 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 H ₂ S 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 H ₂ S 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 need 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 County Sheriff's Department	(505) 887-7551
New Mexico State Police	(505) 888-3137
Fire Department	(505) 885-2111
Carlsbad Hospital	(505) 887-4100
Southwest Air Ambulance/Carlsbad, NM	(505) 525-2660
Carlsbad City Police	(505) 885-2111
New Mexico D.O.T.	(505) 827-5100
Bureau of Land Management	(505) 393-3612
U.S. Dept. of Labor	(505) 248-5302

BP America

Drilling Supervisor

John Elsen

Office (432) 894-0448

Home (989) 631-4897

Cell (989) 430-2259

Bill Owens

Office (432) 894-0448

Home (915) 584-8888

Cell (817) 707-7112

Drilling Engineer

Josh Sudderth

Office (281) 366-0183

Home (713) 666-0907

Cell (281) 513-1466

Drilling Advisor

Gary Martin

Office (432) 688-5230

Cell (432) 238-7008

Challenge Engineer:

William Gutierrez

Office (281) 366-7450

SH&E

David Carrillo

Office (432) 688-5239

Home (432) 699-3272

Cell (432) 664-2095

Nabors Drilling

Nabors Odessa

Office (432) 362-0481

Nabors #399

Rig (432) 664-8099

Drilling Superintendent:

Don Nelson

Home (432) 524-3559

Cell (432) 664-9990

Tool Pushers:

Isidro Garcia

Cell (432) 523-5941

Michael Garcia

Cell (432) ____-____

Safety Contractor

Callaway Safety Equipment

Hobbs (505) 392-2973

Odessa (432) 561-5049

Affected Public Notification List
(within a 65' radius of exposure @100ppm)

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. GENERAL INFORMATION SECTION

**Drilling/Re-Entry Permit
(Insert Here When Receive)**

100 ppm Radius Chart
(Insert Here When Receive)

500 ppm Exposure Radius Chart
(Insert Here When Receive)

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	Limit (A)	Limit (B)	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.

Rescue-First Aid for Hydrogen Sulfide Poisoning

Do Not Panic!!!

Remain Calm--THINK

1. Hold your breath (Do not inhale; stop breathing.) and go to Briefing area.
2. Put on breathing apparatus.
3. Remove victim(s) to fresh air as quickly as possible. (Go upwind from the source or at right angles to the wind; NOT downwind.)
4. Briefly apply chest pressure--arm lift method of artificial respiration to clear the victim's lungs and to avoid inhaling any toxic gas directly from the victim's lungs
5. Provide for prompt transportation to the hospital, and continue giving artificial respiration if needed.
6. Hospital(s) or medical facilities need to be informed, beforehand, of the possibility of H₂S gas poisoning, no matter how remote the possibility.
7. Notify emergency room personnel that the victim(s) have been exposed to H₂S gas.

Besides basic first aid, everyone on location should have a good working knowledge of artificial respiration, as well as first aid for eyes and skin contact with liquid H₂S. Everyone needs to master these necessary skills.

X. MAPS AND PLATS SECTION

See Next (4) Pages – **Map of Wellsite**
Location Verification Map
Vicinity Map
Well Location Plat

Emergency Call List of Residents and Businesses
None until 1.2 miles South

L-2005-0657-A

NEW MEXICO



Drawn By: LVA	Date: July 14, 2005
Scale: 1"=100'	Field Book: 303 / 42-44
Revision Date:	Quadrangle: Loco Hills
W.O. No: 2005-0657	Dwg. No.: L-2005-0657-A

WEST COMPANY of Midland, Inc.

110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 - (432) 687-0868 FAX

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name GOLDFISH FED. 17	Well Number 1
OGRID No. 778	Operator Name BP AMERICA PRODUCTION COMPANY	Elevation 3671'

Surface Location

UL or lot No. H	Section 17	Township 17 S	Range 30 E	Lot Idn	Feet from the 2055	North/South line NORTH	Feet from the 1015	East/West line EAST	County EDDY
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Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

Dedicated Acres 320 AC.	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

NOTE: 1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.		NM-2933	320 AC	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Sue Sellers</u> Signature <u>Sue Sellers</u> Printed Name <u>Regulatory Asst.</u> Title <u>September 13, 2005</u> Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>July 11, 2005 Date Surveyed Signature & Seal of Professional Surveyor <u>[Signature]</u> W.O. Num. 2005-0657 Certificate No. MACON McDONALD 12185</p>
		NM-86025	NM-074936	
		LC-060527		
		NM-86025		

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: BP America Production Company
Well Name & No. Goldfish 17 Federal #1
Location: 2055' FNL, 1015' FEL, Section 17, T. 17 S., R. 30 E., Eddy County, New Mexico
Lease: NM-074936

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:
 - A. Well spud
 - B. Cementing casing: 13-3/8 inch 8-5/8 inch 5-1/2 inch
 - C. BOP tests
2. A Hydrogen Sulfide (H₂S) Drilling Operation Contingency Plan shall be activated prior to drilling into the Grayburg formation. A copy of the plan shall be posted at the drilling site.
3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.
5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The 13-3/8 inch surface casing shall be set at approximately 500 feet or 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is to be circulated to the surface.
3. The minimum required fill of cement behind the 5-1/2 inch production casing is to be sufficient to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 5000 psi.
3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

8/24/05

acs

8/24/2005

acs