District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 8821
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

NOTIFY OCD TO WITNESS ALL CASING STRINGS

:o Resources

RECEIVED

:iion JAN 20 2005

1220 S. St. Francis Dr. OCD-ARTESIA
Santa Fe, NM 87505

Form C-101
March 4, 2004
Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

# APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

| [1] Operator Name and Address | [2] OGRID Number |
|---|---|
| Nearburg Producing Company<br>3300 N A St., Bldg 2, Ste 120, Midland, TX 79705 | 015742<br>[3] API Number<br>30- 015-33902 |

| [4] Property Code | [5] Property Name | [6] Well No. |
|---|---|---|
| 13595 | Big Walt 2 State | 6 |

## [7] Surface Location

| UL or lot no. | Section | Township | Range | Lot. Idn | Feet from the | North/South Line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| J | 2 | 22S | 24E | | 1376 | South | 2152 | East | Eddy |

## [8] Proposed 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 |
|---|---|---|---|---|---|---|---|---|---|
| K | 2 | 22S | 24E | | 1650 | South | 1980 | West | Eddy |

| [9] Proposed Pool 1 | [10] Proposed Pool 2 |
|---|---|
| Indian Basin; Upper Penn, Associated (33685) | |

## Drilling Pit Location and Other Information

| UL or lot no. | Section | Township | Range | Lot. Idn | Feet from the | North/South Line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| J | 2 | 22S | 24E | | 1376 | South | 2152 | East | Eddy |

| Depth to ground water | Distance from nearest fresh water well | Distance from nearest surface water |
|---|---|---|
| | | |

| [11] Work Type Code | [12] Well Type Code | [13] Cable/Rotary | [14] Lease Type Code | [15] Ground Level Elevation |
|---|---|---|---|---|
| N | O | R | S | 3932 |
| **[16] Multiple** | **[17] Proposed Depth** | **[18] Formation** | **[19] Contractor** | **[20] Spud Date** |
| No | 8600' | Cisco Canyon | Patterson-UTI | 2/1/05 |

## [21] Proposed Casing and Cement Program

| Hole Size | Casing Size | Casing weight/foot | Setting Depth | Sacks of Cement | Estimated TOC |
|---|---|---|---|---|---|
| 14-3/4 | 9-5/8 | 36 | 1600 | 800 | Circ to Surface |
| 8-3/4 | 7 | 23 & 26 | 8600 | 1000 | Circ to Surface |
| | | | | | |
| | | | | | |
| | | | | | |

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Propose to drill the well to a sufficient depth to evaluate the Cisco Canyon formation. After reaching TD, logs will be run and casing set if the evaluation is positive. Perf, test and Stimulate as neceddary to establish production.

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☑ a general permit ☐, or an (attached) alternative OCD-approved plan ☐ .**

Signature: Sarah Jordan

Printed name: Sarah Jordan

Title: Production Analyst

E-mail Address: sjordan@nearburg.com

Date: 1/13/05

Phone: 432/686-8235 x 203

OIL CONSERVATION DIVISION

Approved by: TIM W. GUM

Title: DISTRICT II SUPERVISOR

Approval Date: JAN 24 2005

Expiration Date: JAN 24 2006

Conditions of Approval:

Attached ☐

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

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

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

# OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| API Number | Pool Code | Pool Name |
|---|---|---|
| | 33685 | Indian Basin; Upper Penn, Associated |

| Property Code | Property Name | Well Number |
|---|---|---|
| 13595 | BIG WALT 2 STATE | 6 |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 015742 | NEARBURG PRODUCING COMPANY | 3932' |

### Surface Location

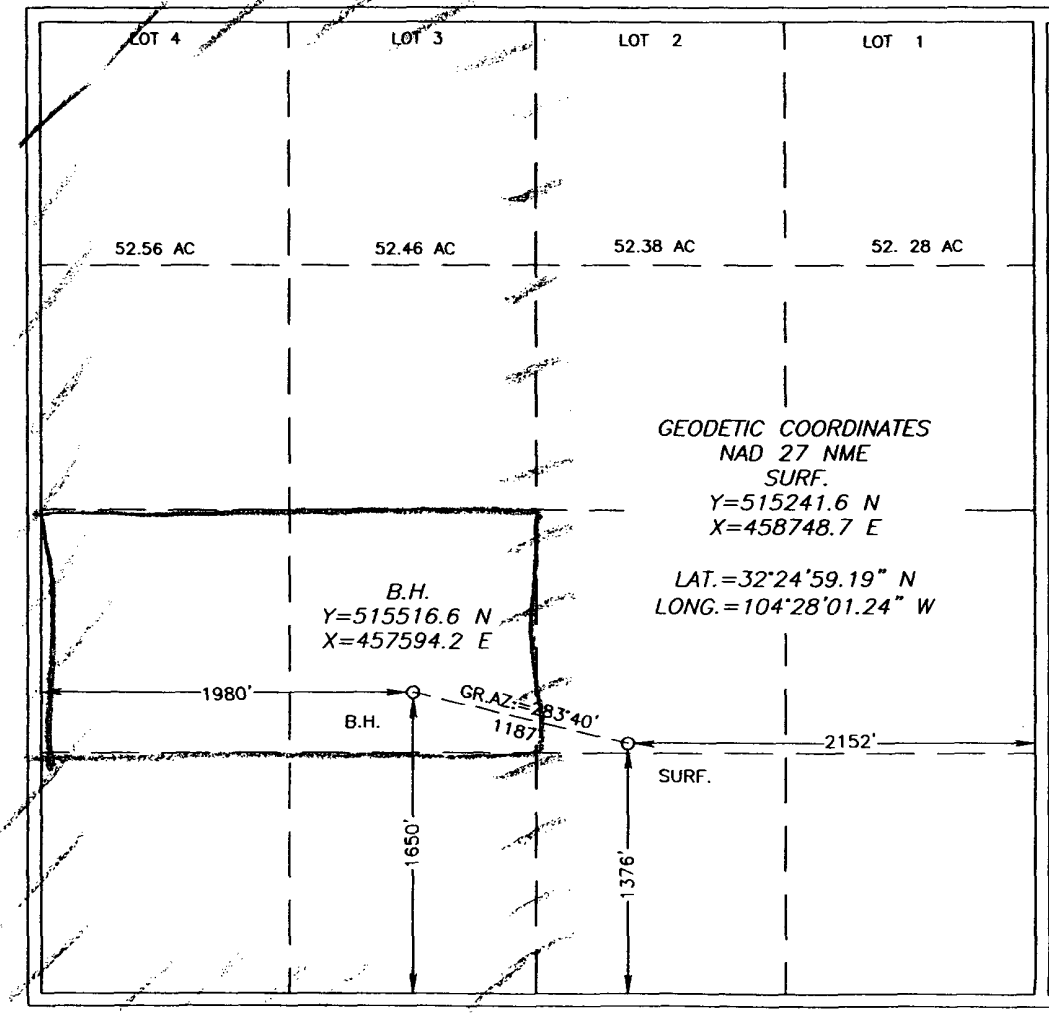
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| J | 2 | 22-S | 24-E | | 1376 | SOUTH | 2152 | EAST | EDDY |

### 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 |
|---|---|---|---|---|---|---|---|---|---|
| K | 2 | 22-S | 24-E | | 1650 | SOUTH | 1980 | WEST | EDDY |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|---|---|---|---|
| 320 | | | |

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




### OPERATOR CERTIFICATION

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

Signature

Sarah Jordan
Printed Name

Prod. Analyst
Title

1.13.05
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 supervison, and that the same is true and correct to the best of my belief.*

DECEMBER 02, 2003
Date Surveyed REV: 1/13/05 JR

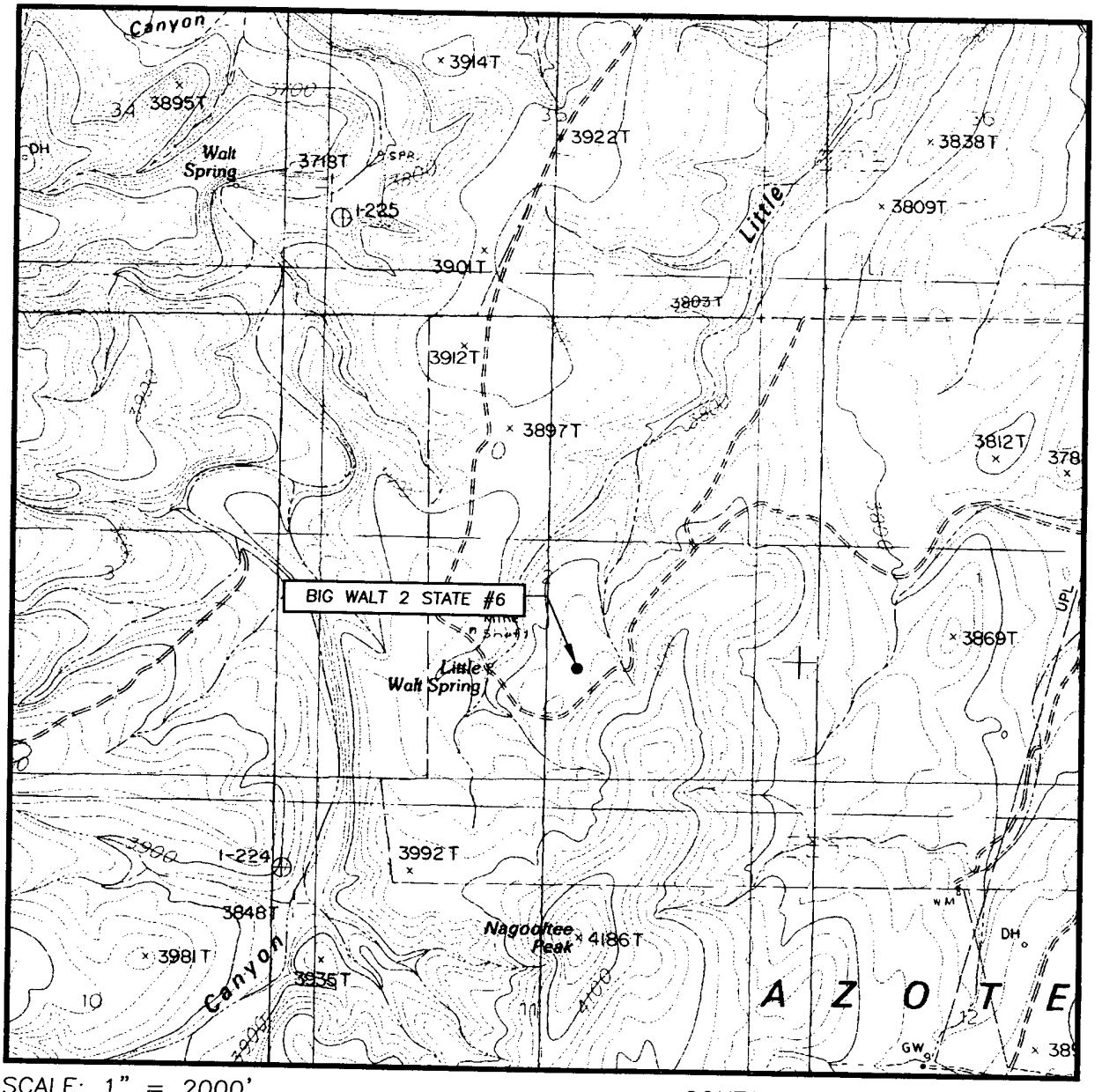
Signature & Seal of Professional Surveyor

Gary L. Eidson 1/13/05

05.13.0032

Certificate No. GARY EIDSON 12641

# LOCATION VERIFICATION MAP




SCALE: 1" = 2000'

CONTOUR INTERVAL:
AZOTEA PEAK, N.M. – 10'

SEC. 2 TWP. 22-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1376' FSL & 2152' FEL

ELEVATION 3932'

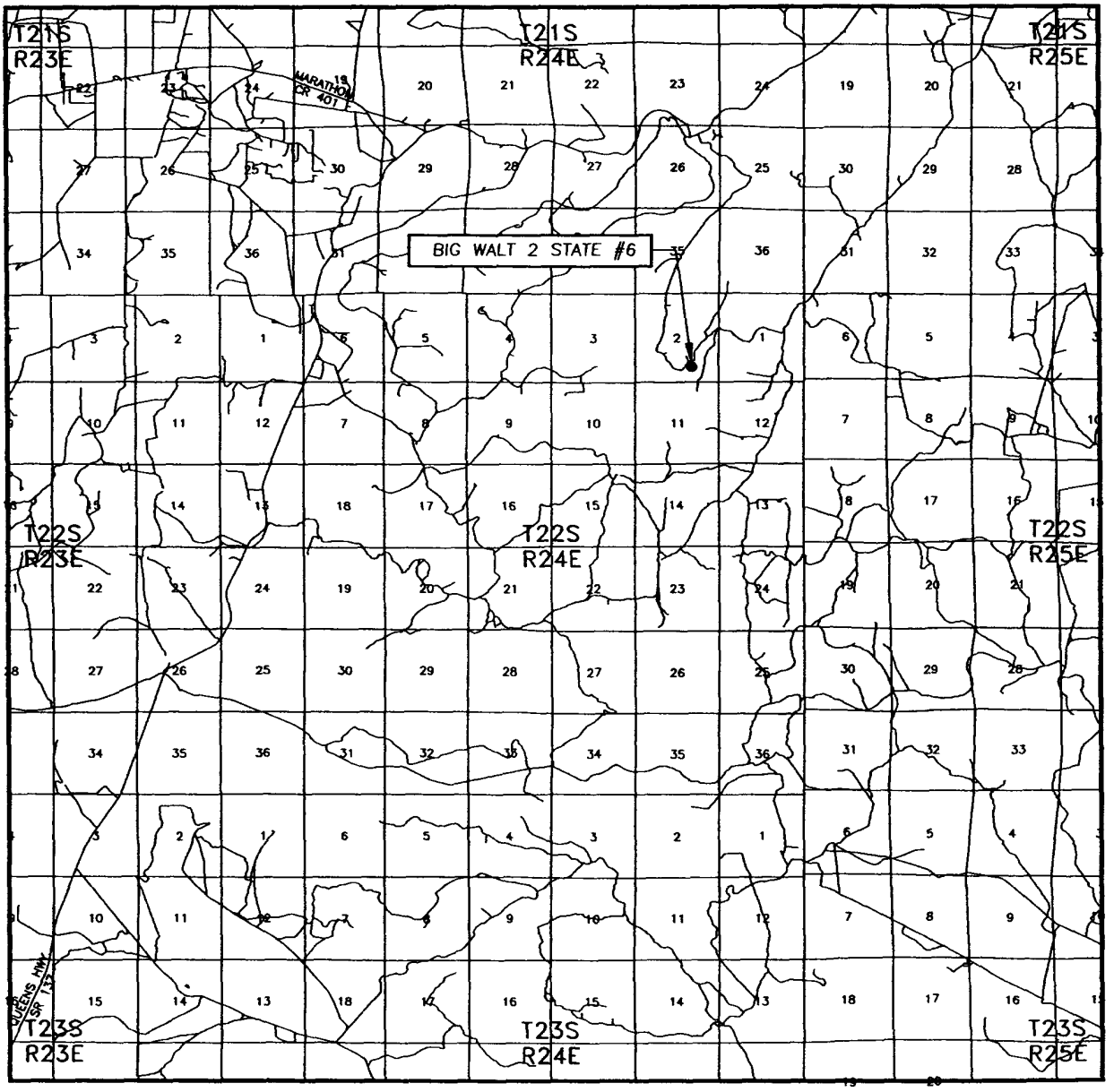
OPERATOR NEARBURG PRODUCING COMPANY

LEASE BIG WALT 2 STATE

U.S.G.S. TOPOGRAPHIC MAP
AZOTEA PEAK, N.M.


PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

# *VICINITY MAP*




SCALE: 1" = 2 MILES

SEC. 2 TWP. 22-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

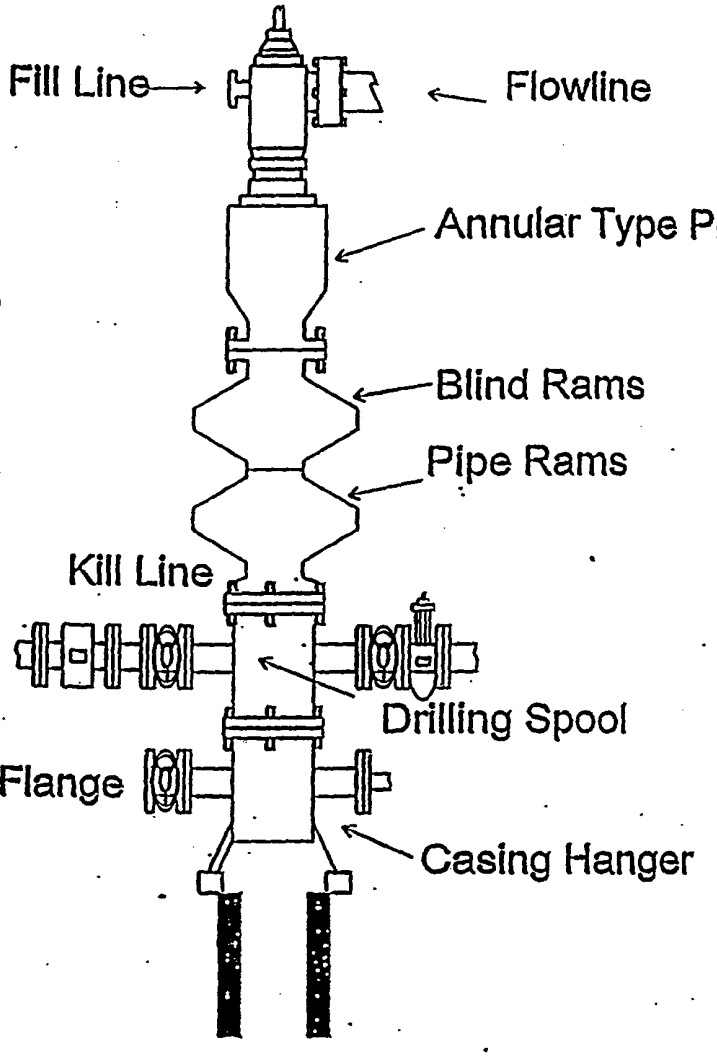
DESCRIPTION 1376' FSL & 2152' FEL

ELEVATION 3932'

OPERATOR NEARBURG PRODUCING COMPANY

LEASE BIG WALT 2 STATE

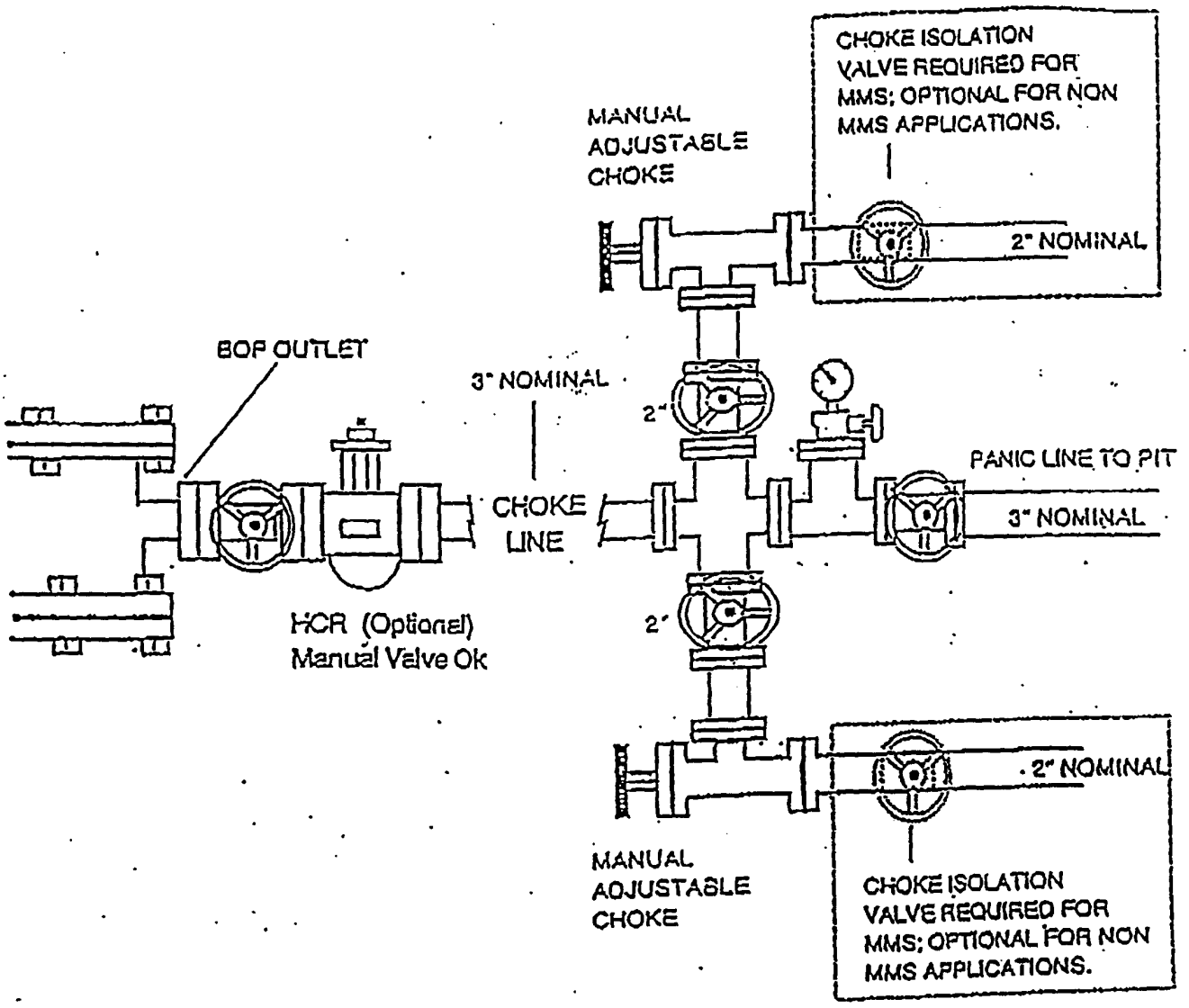

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117




Rotating Head (Optional) Drilling Nipple option must include a fill-up line. Do not use kill line for fill up.

1500 Series

# FARBURG PRODUCING COMP
## CHOKE MANIFOLD
## 5M SERVICE



# Nearburg Producing Company

3300 N A St., Bldg 2, Suite 120
Midland, TX 79705

# Hydrogen Sulfide (H2S) Contingency Plan

For

Big Walt 2 State #6
SHL: 1376' FSL and 2152' FEL
BHL: 1650' FSL and 1980' FWL
Sec. 2, T22S, R24E
Eddy County, New Mexico

And

Patterson Drilling Rig #55

**PUBLIC PROTECTION PLAN**
**NEARBURG PRODUCING COMPANY**

**TABLE OF CONTENTS**

# PUBLIC PROTECTION PLAN
# NEARBURG PRODUCING COMPANY

## 1. PURPOSE

This plan is intended to protect the health and safety of the public, contractors and Nearburg Producing Company (NPC) personnel should an unanticipated release of a potentially hazardous volume of Hydrogen Sulfide (H2S) occur.

Further to:

- Comply with the Bureau of Land Management's (BLM) Onshore Oil and Gas Operations Onshore Oil and Gas Order No. 6, Hydrogen Sulfide Operations (43 CFR Part 3160).
- Comply with the State of New Mexico Oil Conservation Division's (NMOCD) rule 19 NMAC 15.C 118.
- Assure proper notification of the appropriate parties and agencies.

## 2. SCOPE

The provisions of this document are intended to address Hydrogen Sulfide (H2S) releases and H2S emergencies at Nearburg Producing Companies production batteries and all surrounding operated field locations in the McKittrick Hills Field. Facilities for which calculations indicate a potential hazardous volume of H2S could occur have additional site specific response information and radius of exposure drawn on the attached plat map. The field is located approximately 20 miles west of Carlsbad, New Mexico (Eddy County).

This plan is intended to be used in conjuction with the Emergency Response plan that is available at the Artesia Field Office and applies to RMS Level 1 incidents.

## 3. DEFINITIONS

**All Clear** - Notification of effected personnel, by the response leader, that the incident has ended and the area is safe to re-enter.

**A Potentially Hazardous Volume** - a volume of Hydrogen Sulfide (H2S) gas of such concentrate that:

- The 100-ppm ROE includes any public area.
- The 500-ppm ROE includes any public road.
- The 100-ppm ROE exceeds 3,000 feet.

**Facility** – Equipment involved in producing, processing, or transporting natural gas and/or crude oil, including the property to the edge of the pad or fence.

# PUBLIC PROTECTION PLAN
# NEARBURG PRODUCING COMPANY

**Hydrogen Sulfide Gas (H2S)** – is extremely flammable, colorless, poisonous gas that may occur naturally as a component of production streams, such as crude oil, produced water and natural gas. At low concentrations it has a rotten egg odor, but at higher concentrations deadens the sense of smell. Its specific gravity is heavier than air giving it a tendency to collect in low-lying areas on still days. The permissible exposure limit is 10 ppm and the short term exposure limit is 15 ppm. It is considered to be immediately dangerous to life and health at 300 ppm. H2S is readily dispersed in air and is water soluble.

**ICS (Incident Command System)** – A team based concept for emergency response in which roles and responsibilities are predetermined.

**Incident Commander (IC)** – Senior Nearburg Producing Company employee in charge of an emergency response.

**Incipient Stage Fire** – A fire in the beginning or very early stages of development, which can be effectively extinguished by one or more persons with portable fire fighting equipment.

**Muster Site** – A pre-defined staging or meeting area.

**RMS Level I** – an emergency that can be reasonably addressed by Artesia Area Office in which the incident occurs and that can be resolved in approximately two days or less.

**ROE** (Radius of Exposure) – The radius constructed with the point of escape (of gas) as its starting point and its length calculated using the Pasquill-Gifford derived equation or computer modeling where the H2S concentration is greater than 10%.

**PPM** – Parts per Million

**Public Area** – Any building or structure that is not associated with the well, facility or operation for which the ROE is being calculated and that is used as a dwelling, office, place of business, church, school, hospital or government building, or any portion of a park, city, town, village, or designated school bus stop or other similar area where members of the public may reasonably be expected o be present.

**Public Road** – Any federal, state, municipal or county road or highway.

**Serious Incident** – An event which results or has the potential to result in severe personal injury and/or significant equipment damage.

**Sulfur Dioxide (SO2)** – A heavy colorless toxic gas that is formed when hydrogen sulfide is burned. It has a pungent odor and is a respiratory irritant. The permissible exposure limit is 2 ppm, the short rem exposure limit is 5 ppm. It is considered to be immediately dangerous to life and health at 100 ppm. SO2 is readily dispersed in air and is water soluble.

**Total Personnel Evacuation** – An evacuation of all persons (contract employees, or visitors) from the emergency area to a muster area.

# PUBLIC PROTECTION PLAN
# NEARBURG PRODUCING COMPANY

## 4. THE PLAN

**Training:**

All personnel (company, contractors and sub-contractors) working in the field for NPC are required to complete hydrogen sulfide training before beginning work and annually thereafter.

Training on the contents of this plan shall be provided to all NPC and appropriate contract personnel working for NPC:

- whenever the employees' responsibilities or designated actions under the plan change,
- whenever the contents of the plan are changed/revised
- whenever a new employee begins employment, and
- periodically as needed for all employees.

Nearburg Producing Company supervision is responsible for this training.

**Orientation:**

All persons visiting or working at Indian Basin shall receive an orientation covering the following minimum items:

- What types of emergencies are possible,
- What the emergency evacuation alarm sounds like in the gas plant,
- How to report an incident/emergency,
- Who will be in charge during an emergency,
- How to safely evacuate the plant, and
- Where to assemble so that all persons can be accounted for.

The NPC representative responsible for the contractors or visitors shall conduct the orientations and shall document attendees and dates.

**H2S Monitors:**

All personnel working at the Indian Basin are required to wear personal H2S monitor at all times when working in the plant or field. Monitors should have a vibrating alarm if used in high noise areas.

**Activation:**

Phase I – activated when:

1. Sustained H2S concentration reaches 10 parts per million (ppm) in any work area and the source is not readily identified and/or controllable.
2. Continuous H2S levels are detected at 10 ppm (or greater) at any public road, near an occupied residence or bus stop, and the source is not readily identified and/or immediately controlled.

Phase II – activated when:

1. A potentially hazardous volume of H2S is detected.
2. When sustained H2S concentrations exceed 50 ppm at any facility boundary.

# PUBLIC PROTECTION PLAN
# NEARBURG PRODUCING COMPANY

**Phase I:**

Upon discovery on-site personnel should:

- ☐ Make others on-site aware of the presence of H2S and leave the area upwind or crosswind to a safe location. (Pre-determine if a pre-job tailgate meeting was conducted).
- ☐ Prevent unauthorized persons from entering the area. Request assistance if needed.
- ☐ If a residence or other public area is in the vicinity, monitor for H2S to ensure exposure is less than 10 ppm. Notify supervisor if higher exposures are noted or if any other questions arise about steps necessary to protect these sensitive areas.
- ☐ If considering re-entering the area to assess the H2S source, ensure you have been properly trained to respond. Use an H2S monitor with digital display (preferably a multi-gas monitor) and have a supplied air respirator (SAR) and back up person with SAR readily available. Consider notification of supervisor if appropriate.
- ☐ Proceed with caution. If H2S concentration reaches 10 ppm in your breathing zone, back out and use SAR to re-enter. **If H2S concentration reaches 50 ppm at the facility boundary, immediately notify supervision.**
- ☐ If source can be safely controlled, monitor area to ensure H2S levels are below 10 ppm. End response here and sound all clear to allow others to re-enter the area. Report length of release and volume to supervisor.
- ☐ If the source of H2S cannot be identified and/or controlled, or if you cannot do so with out exposing yourself to danger, leave the area to a safe distance.
- ☐ Notify supervision.
- ☐ Continue to monitor for H2S and maintain site security until instructed be supervision to do otherwise.

Supervision:

- ☐ Gather necessary information to determine the course of action and level of response.
- ☐ Mobilize any additional man power or equipment necessary.
- ☐ Ensure Phase II measures are implemented if appropriate.
- ☐ Continue to monitor situation until incident is over.
- ☐ Make notifications if required.
- ☐ Complete reports if required.
- ☐ Investigate as indicated.

**Phase II**

Upon discovery on-site personnel should:

- ☐ Make others on-site aware of the presence of H2S and leave the area upwind or crosswind to a safe location. (Pre-determined if a pre-job tailgate meeting was conducted).
- ☐ Prevent authorized persons from entering the area.
- ☐ **Notify Supervisor.**

Supervision:

- ☐ Initiate the Incident Command System as deemed appropriate.
- ☐ Mobilize the resources necessary to maintain site security and provide for the protection of personnel and the public.
- ☐ Issue warnings to all NPC personnel by radio and/or phone (IB Contact List) to make them aware of the incident and its location. Have non-essential personnel leave the area. If deemed necessary, order a total personnel evacuation of the area.

- ☐ Notify non-company personnel known to work or reside in the area (IB Contact List). If necessary to ensure their safety, dispatch NPC personnel with the appropriate monitor, supplied air respirators and means of communication to these locations. *(Appendix B)*
- ☐ Have NPC personnel set up road blocks to prevent unauthorized entry into impacted areas until relieved by law enforcement or other authorized personnel.
- ☐ Make all appropriate notifications to NPC, Federal, State and local authorities.
- ☐ When the release has been contained and monitoring indicates the area is safe to re-enter, terminate operations and sound the all clear.
- ☐ Complete records if required.
- ☐ Investigate as indicated.
- ☐ For spills, well blowouts, fires, natural disasters and terrorist or bomb threats

All other personnel not involved in the immediate response:

- ☐ If a total evacuation is ordered, report to the incident command center or nearest muster site to which you have safe access. (See Appendix A for muster site locations)
- ☐ Ensure all contract personnel working for you (or in your area) are accounted for and have them report to a safe muster site.
- ☐ Senior employee at each muster site should make a roster of all personnel reporting to that muster site and be prepared to make it available to the incident commander (IC).
- ☐ Maintain communication with the IC and be prepared to offer assistance as it is requested.

**Ignition of H2S:**

While no uncontrollable release of H2S is anticipated, should ignition of gas be necessary for the protection of personnel or the public, the determination would be made by the NPC Incident Commander. The method of ignition will maintain the safety of the person performing this task as the primary concern. The most likely method would be the use of a flare gun from a safe distance.

If this becomes necessary, monitoring will include sulfur dioxide (SO2) in addition to H2S.

**PUBLIC PROTECTION PLAN**
**NEARBURG PRODUCING COMPANY**

## 6. APPROVALS

Approved by: Name: [signature] Date: 1.13.05
Title: Drilling Manager

# NEARBURG PRODUCING COMPANY
# REGULATORY CONTACTS

| Agency | Contact Name | | Division/Area | Main Phone # | Cell Phone | Home Phone # |
|---|---|---|---|---|---|---|
| | First | Last | | | | |
| NMOCD | Emergency Number | | District 2 | 505-746-4302 | | |
| NMOCD | Field Rep On-Call | | District 2 | 505-939-8622 | | |
| NMOCD | Tim | Gum | District 2 | 505-748-1283 | 505-626-0824 | 505-324-1387 |
| NMOCD | Mike | Stubblefield | District 2 | 505-748-1283 | 505-626-0831 | 505-746-6422 |
| | | | | | | |
| NMOCD | Gerry | Guye | District 2 | 505-748-1283 | 505-626-0843 | 505-887-3254 |
| NMOCD | Phil | Hawkins | District 2 | 505-748-1283 | 505-626-0836 | 505-746-9272 |
| NMOCD | Bryan | Arrant | District 2 | 505-748-1283 | 505-626-0830 | 505-748-2092 |
| NMOCD | Lori | Wortenberhy | Santa Fe Division Ofc. | 505-827-7131 | 505-476-3460 | 505-466-0134 |
| NMOCD | Ed | Martin | Santa Fe Division Ofc. | 505-827-7131 | 505-476-3492 | 505-685-4056 |
| NMOCD | Roger | Anderson | Santa Fe Division Ofc. | 505-827-7131 | 505-476-3490 | 505-471-2017 |
| NM State Police | | | District 3, Roswell | 505-827-9312 | | |
| NM State Police | | | Sub-District 3, Roswell | 505-622-7200 (call this # for dispatch to our area) | | |
| BLM | | | Carlsbad | 505-887-6544 | | |
| US Coast Guard | | | National Response Center | 800-424-8802 | | |
| NMED | | | Air Quality Bureau | 505-827-1494 | | |
| | State Emergency Response Center | | | 505-827-9126 | | |
| LEPC | Local Emerg. Planning Commission - Eddy County | | | 505-885-2111 | | |
| NM OSHA | New Mexico OSHA Ofc. | | | 505-827-2850 | | |

# EMERGENCY SERVICES

| Service Provider | Description | Main Phone | |
|---|---|---|---|
| | | | |
| ***General Emergency*** | ***Police, Fire, Ambulance*** | ***911*** | |
| Carlsbad Police, Fire, Ambulance Service | | 505-885-2111 | |
| Artesia General Hospital | Medical Services | 505-748-3333 | |
| Carlsbad Fire Dept. | Fire Control | 505-885-3124 | |
| Artesia Fire Dept. | Fire Control | 505-746-2701 | |
| Happy Valley Fire Dept. | Fire Control | 505-885-1982 | |
| NM State Police | Sub-District 3, Carlsbad | | |
| NM State Police (Dispatcher) | District 3, Roswell | 505-622-7200 | |
| Eddy County Sheriff | Law Enforcement | 505-887-7551 | |

# NEARBURG PRODUCING COMPANY
# EMERGENCY RESPONSE PLAN

| Position | Office Phone | Cell Phone # | Home Phone # |
|---|---|---|---|
| | | | |
| **Drilling Superintendent** | | | |
| Butch Willis | 432-686-8235 (223) | | |
| **Production Superintendent** | | | |
| Matt Lee | 505-746-0422 | 505-365-6662 | 505-746-0932 |
| **Operations** | | | |
| Roger King | 505-746-0422 | 505-361-3605 | 505-885-3605 |
| Rick Foutch | 505-746-0422 | 505-361-4211 | 505-887-7844 |
| Jerry Stark | 505-746-0422 | 505-365-4672 | 505-746-3862 |
| **Planning Section** | | | |
| Fred White | 214-739-1778 | 469-644-1326 | 972-931-8845 |
| Bob Shelton | 432-686-8235 (214) | 432-682-3100 | 432-528-6134 |
| **Public Affairs** | | | |
| Bob Shelton | 432-686-8235 (214) | 432-682-3100 | 432-528-6134 |

# AREA RESIDENTS AND OFFSET OPERATIONS

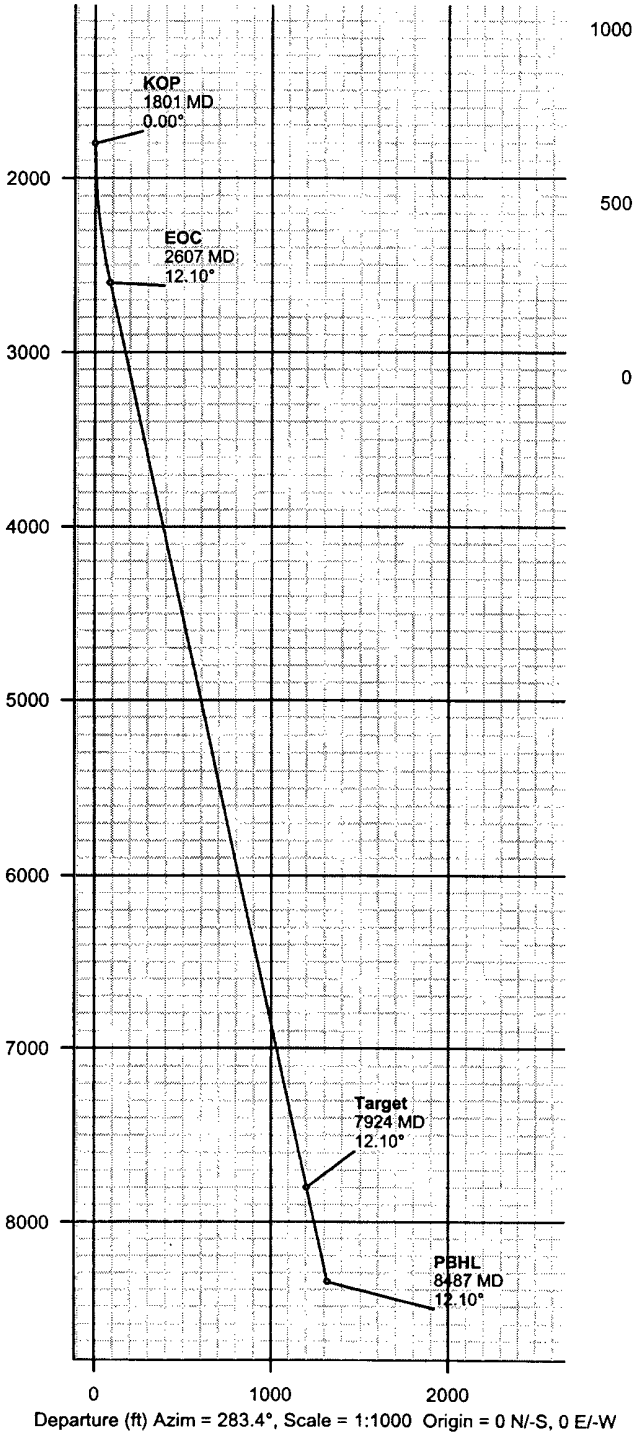
| Location Desciption | Contact | Title | Address | City/ST/Zip | Phone 1 | Cell | Location Info. |
|---|---|---|---|---|---|---|---|
| 4TK + (Boles) | Wilkie, Mark & Sandi | | 1073 Marathon Rd. | Carlsbad, NM 88220 | 505-457-2022 | | |
| Foster Ranch | Foster, John | | P.O. Box 103 | Artesia, NM 88211-0103 | 505-457-2165 | | |
| Forrest Lee Ranch | Lee, Dean | | P.O. Box 89 | Lakewood, NM 88254 | 505-457-2301 | | Trailer house near NIBU 24 |
| Gissler Ranch | Cox, Billy | | 344 Pinderosa Pine | Carlsbad, NM 88220 | 505-457-2397 | | |
| Gregory's | Gregory, Wayne | | 617 Queens Hwy. | Carlsbad, NM 88220 | 505-457-2245 | | |
| HH Ranch | Houchtaling, Harold | | P.O. Box 234 | Artesia, NM 88211-0234 | 505-457-2245 | | |
| Howell Ranch | Howell, Richard | | P.O. Box 94 | Lakewood, NM 88254 | 505-457-2602 | | |
| Kincaid Ranch | Kincaid, Gene | | 2913 Octotilly Canyon Dr. | Carlsbad, NM 88220 | 505-887-6918 | | |
| Kincaid Ranch | Kincaid, Hugh | | 2911 Octotilly Canyon Dr. | Carlsbad, NM 88220 | 505-885-9458 | | |
| Kincaid Ranch | Marbauch, Jim | | 1762 Qureen Hwy. | Carlsbad, NM 88220 | 505-457-2233 | | Lives at ranch house just E of Hwy 137 About 2 miles past mile marker 42 towrds Queens. |
| Old Jones Ranch | Lasiter, Rick | | | | 505-457-2108 | | |
| Schafer Ranch | Biebelle, Stacey | | 646 Qureen Hwy. | Carlsbad, NM 88220 | 505-457-2360 | | House near low water crossing on Hwy 137 |
| Patsy's old house | DeMoss, Neil | | | | none | | |
| Chevron Oil | Boles, Randy | | | | | 505-390-7232 | |
| Chevron Oil | Angel, Kenneth | | | | | 505-390-1540 | |
| Devon | Daniel | | | | 505-390-5850 | | |
| Devon | Crosbey, Owen | | | | 505-748-7749 | | |
| Devon | Huber, Mark | | | | 505-748-5502 | | |
| Devon | Canada, Don | | | | 505-748-5503 | | |
| Devon | Brady | | | | 505-390-5431 | | |
| Devon | Huber, Joe | Superintendent | | | 505-390-5438 | | |
| Devon | "Doghouse" | | | | 505-457-2613 | | |
| Duke Energy | Lamb, Johnny | Foreman | | | 505-390-2791 | | |
| Duke Energy | Main Office | | Carlsbad | | 505-628-0282 | | |
| Duke Energy | Valenzuela, Oscar | | | | 505-910-4675 | | |
| El Paso | Jacquez, David | Gas Measurement | | | 505-857-2158 | | |
| KMG (Kerr McGee) | Deese, Tommy | Superintendent | | | 505-234-2703 | 505-706-3423 | |
| KMG (Kerr McGee) | Chalker, Andy | Prod. Foreman | | | 505-234-2703 | 505-910-0342 | |
| KMG (Kerr McGee) | Hess, Bobby | Team Leader | | | 505-234-2703 | 505-706-3543 | |
| KMG (Kerr McGee) | Wilson, James | | | | | | |
| KMG (Kerr McGee) | Brannon, Steve | | | | 505-390-1540 | 505-706-3669 | |
| Yates Petroleum (Agave) | Main Office | | | | 505-784-1471 | | |
| Yates Petroleum (Agave) | Johnson, Bill | Foreman | | | 505-748-6816 | 505-365-4615 | |
| Yates Petroleum (Agave) | Moorehead, Robert | | | | 505-748-6815 | 505-365-4840 | |

# Nearburg Producing Company

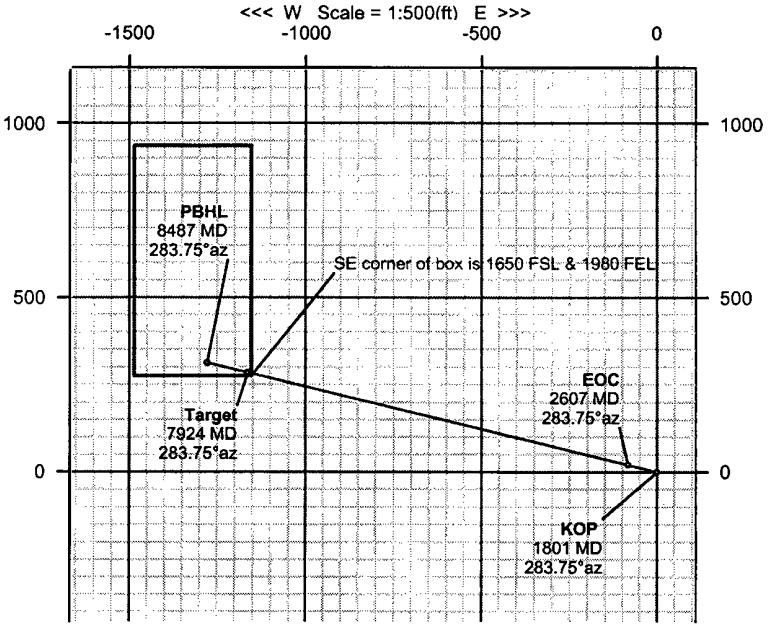
| WELL | FIELD | STRUCTURE |
|---|---|---|
| Big Walt 2 St. #6 | Eddy County, NM | Big Walt 2 St. #6 |

| Magnetic Parameters | | | | Surface Location | | | | Miscellaneous | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model: IGRF 2005 | Dip: 60.356° | Date: January 13, 2005 | | Lat: N32 24 59.191 | Northing: 515241.60 ftUS | Grid Conv: -0.07166108° | | Slot: Big Walt 2 St. #6 | TVD Ref: RKB (0.00 ft above ) | | |
| | Mag Dec: +8.753° | FS: 49304.9 nT | | Lon: W104 28 1.243 | Easting: 458748.70 ftUS | Scale Fact: 0.999910398 | | Plan: Big Walt 2-6_r2 | Srvy Date: Thu 09:45 AM January 13, 2005 | | |

NAD27 New Mexico State Planes, Eastern Zone, US Feet




Departure (ft) Azim = 283.4°, Scale = 1:1000 Origin = 0 N/-S, 0 E/-W




INTREPID
Directional Drilling Specialists

# Proposal

| | | | |
|---|---|---|---|
| **Report Date:** | January 13, 2005 | **Survey / DLS Computation Method:** | Minimum Curvature / Lubinski |
| **Client:** | Nearburg Producing Company | **Vertical Section Azimuth:** | 283.400° |
| **Field:** | Eddy County, NM | **Vertical Section Origin:** | N 0.000 ft, E 0.000 ft |
| **Structure / Slot:** | Big Walt 2 St. #6 / Big Walt 2 St. #6 | **TVD Reference Datum:** | RKB |
| **Well:** | Big Walt 2 St. #6 | **TVD Reference Elevation:** | 0.0 ft relative to |
| **Borehole:** | Big Walt 2 St. #6 | **Sea Bed / Ground Level Elevation:** | 0.000 ft relative to |
| **UWI/API#:** | | **Magnetic Declination:** | 8.753° |
| **Survey Name / Date:** | Big Walt 2-6_r2 / January 13, 2005 | **Total Field Strength:** | 49304.890 nT |
| **Tort / AHD / DDI / ERD ratio:** | 12.100° / 1317.26 ft / 4.210 / 0.158 | **Magnetic Dip:** | 60.356° |
| **Grid Coordinate System:** | NAD27 New Mexico State Planes, Eastern Zone, US Feet | **Declination Date:** | January 13, 2005 |
| **Location Lat/Long:** | N 32 24 59.191, W 104 28 1.243 | **Magnetic Declination Model:** | IGRF 2005 |
| **Location Grid N/E Y/X:** | N 515241.600 ftUS, E 458748.700 ftUS | **North Reference:** | Grid North |
| **Grid Convergence Angle:** | -0.07166108° | **Total Corr Mag North -> Grid North:** | +8.825° |
| **Grid Scale Factor:** | 0.99991104 | **Local Coordinates Referenced To:** | Well Head |

| Comments | Measured Depth (ft) | Inclination (deg) | Azimuth (deg) | TVD (ft) | Vertical Section (ft) | NS (ft) | EW (ft) | Closure (ft) | Closure Azimuth (deg) | DLS (deg/100 ft) | Tool Face (deg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tie-In | 0.00 | 0.00 | 283.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -76.25M |
| KOP | 1800.67 | 0.00 | 283.75 | 1800.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -76.25M |
| | 1900.00 | 1.49 | 283.75 | 1899.99 | 1.29 | 0.31 | -1.25 | 1.29 | 283.75 | 1.50 | -76.25M |
| | 2000.00 | 2.99 | 283.75 | 1999.91 | 5.20 | 1.24 | -5.05 | 5.20 | 283.75 | 1.50 | -76.25M |
| | 2100.00 | 4.49 | 283.75 | 2099.69 | 11.72 | 2.79 | -11.39 | 11.72 | 283.75 | 1.50 | -76.25M |
| | 2200.00 | 5.99 | 283.75 | 2199.27 | 20.85 | 4.96 | -20.26 | 20.85 | 283.75 | 1.50 | 0.00G |
| | 2300.00 | 7.49 | 283.75 | 2298.58 | 32.59 | 7.74 | -31.66 | 32.59 | 283.75 | 1.50 | 0.00G |
| | 2400.00 | 8.99 | 283.75 | 2397.54 | 46.92 | 11.15 | -45.58 | 46.92 | 283.75 | 1.50 | 0.00G |
| | 2500.00 | 10.49 | 283.75 | 2496.10 | 63.84 | 15.17 | -62.01 | 63.84 | 283.75 | 1.50 | 0.00G |
| | 2600.00 | 11.99 | 283.75 | 2594.18 | 83.33 | 19.80 | -80.94 | 83.33 | 283.75 | 1.50 | 0.00G |
| EOC | 2607.34 | 12.10 | 283.75 | 2601.36 | 84.86 | 20.17 | -82.43 | 84.86 | 283.75 | 1.50 | 0.00G |
| Target | 7924.10 | 12.10 | 283.75 | 7800.00 | 1199.33 | 285.00 | -1165.00 | 1199.35 | 283.75 | 0.00 | 0.00G |
| PBHL | 8486.60 | 12.10 | 283.75 | 8350.00 | 1317.24 | 313.02 | -1279.53 | 1317.26 | 283.75 | 0.00 | 0.00G |

PREPARED FOR:

Mr. Butch Willis
**NEARBURG PRODUCING CORPORATION**
Midland, Texas

**Big Walt 2 State # 6**
Section 2
T-22-S
R-24-E
Eddy County, New Mexico

Prepared by:
Randy Auburg
January 17, 2005

# DRILLING FLUID SYNOPSIS

## NEARBURG PRODUCING CORPORATION

**BIG WALT 2 STATE # 6**
**Section 2**
**T-22-S**
**R-24-E**
**Eddy County, New Mexico**

CASING

9 5/8" at 1,600'

5 1/2" at 8,600'

| DEPTH | MUD WEIGHT | VISCOSITY | FLUID LOSS | DRILL SOLIDS | COMMENTS |
|---|---|---|---|---|---|
| 0-1,600' | 8.4 to 8.5 | 28 to 29 | No Control | <1% | Fresh Water, Fresh Gel Sweeps, Lime, Paper |
| 1,600'-8,600' | 8.4 to 8.5 | 28 to 29 | No Control | <1% | Fresh Water, Star NP-110, Paper, Lime Starch if needed |

## ESTIMATED FORMATION TOPS

| | |
|---|---|
| SAN ANDRES | 530' |
| DELAWARE | 1,598' |
| BONE SPRINGS | 2,774' |
| WOLFCAMP | 7,460' |
| PENN (CISCO) | 7,860' |
| CANYON | 7,995' |
| TD | 8,600' |

## RECOMMENDED CASING PROGRAM

9 5/8" at 1,600'

5 1/2" at 8,600'

## RECOMMENDED DRILLING FLUID PROGRAM

| DEPTH | WEIGHT | VISCOSITY | FILTRATE |
|---|---|---|---|
| **0-1,600'** | **8.4-8.5** | **28-29** | **No Control** |

Spud with fresh water circulating through the working pits. Sweep the hole with Fresh Water Gel flocculated with Lime mixed at a 10 to 1 ratio. Use Paper for seepage control. There is a potential for lost returns in this interval. If lost returns are encountered and circulation cannot be regained after pumping several viscous LCM pills, you should consider dry drilling to casing point. While dry drilling, we recommend periodically pumping viscous LCM sweeps to prevent solid accumulation in annulus.

| DEPTH | WEIGHT | VISCOSITY | FILTRATE |
|---|---|---|---|
| **1,300'-8,800'** | **8.4-8.5** | **28-29** | **No Control** |

Drill out from under surface with fresh water circulating through the reserve pit. Use Star NP-110 for sweeps and to control solids. Use Lime for 9.0 to 10.0 pH. Paper should be used for seepage. The hole should be swept every 200', or as needed, with pre-hydrated Fresh Water Gel. This will minimize solids buildup in the annulus and reduce the possibility of lost circulation while drilling the Upper Penn and other under pressured formations. There is a potential for lost returns in this interval. If lost returns are encountered and circulation cannot be regained after pumping several viscous LCM pills, you should consider dry drilling to casing point. While dry drilling, we recommend periodically pumping viscous LCM sweeps, to prevent solid accumulation in annulus. There is a possibility of encountering $H_2S$ from the Bone Springs as well as the Upper Penn. If $H_2S$ is encountered, we recommend additions of an $H_2S$ Scavenger for personnel safety and a Filming Amine to protect the drill pipe. We recommend utilizing a ±200 bbl premix pit for sweeps and LCM pills.

Note: we recommend a blend of Fiber Plug, Nut Shell, Maxi-Seal (Chem-Seal), and Mica may be used as LCM in this interval.

If a drilling fluid is desired for evaluation of this interval, we recommend returning to the working pits and utilizing a Star NP-110/Starch type fluid. Use Starch to reduce the API fluid loss below 15cc. Maintain pH at 9.0 to 10.0 with Lime. If additional viscosity is desired we recommend using Fresh Gel. This fluid should be sufficient for evaluation in this area.

**Estimated Drilling Fluid Cost: $4,000.00 to $5,000.00**
**Estimated Drilling Days: 13 to 16**

**Cost is based on a 1,000 bbl system and does not reflect lost circulation, abnormal pressure, $H_2S$, unstable hole conditions requiring elevated viscosities or mud in production interval.**

# AMBAR LONE STAR FLUID SERVICES
# LOST CIRCULATION PROCEDURES

Loss of circulation is a possibility on this well. Although each well is different, there are some basic procedures and drilling practices that can aid in reducing the severity or, in some cases, prevent lost circulation. Below is a list, which may prove helpful.

1. Maintain viscosities as low as possible and still clean the hole. We recommend a viscosity of 28 to 29 on this well.
2. Maintain mud weights as low as possible without jeopardizing safety.
3. Use slow trip speeds to prevent swabbing and surging.
4. Break circulation in stages with reduced pump strokes while tripping in the hole.
5. Rotate pipe prior to and while tripping in the hole.
6. Use an optimum hydraulics program.

Severe seepage to total loss of circulation may occur even when the above procedures are followed. For severe seepage, we recommend circulating pills (50-100 bbls. depending on hole size) containing 10-30 ppb of various (fibrous and flake) lost circulation material. It would be helpful to reduce pump rates until full returns are established. Once full returns are regained, normal pump rates should be returned to in stages. The inclusion of lost circulation material in the entire system is recommended only if the above procedures do not adequately seal off the loss zone.

For total loss of circulation, we recommend pulling enough stands to place the bit above the loss zone. A viscous pill containing the appropriate type of loss circulation material should be spotted. The size of the pill should be determined by hole size and should contain at <u>least</u> 30 ppb lost circulation material. Several attempts should be made before considering other alternatives. After returns are regained, we recommend staging back to bottom using the procedure outlined above.

If returns are not fully re-established, consideration should be given to dry drilling while pumping periodic sweeps to ensure hole cleaning.

# 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 21, 2005
Nearburg Producing Company
3300 North "A" St., Bldg 2, Suite 120
Midland, TX 79705
Attn: Mrs. Sarah Jordan

**RE: Nearburg Producing Company: Big Walt '2' State # 6, surface located in Unit J (1376' FSL & 2152' FEL) of Section 2, Township 22 South Range 24 East Eddy County, New Mexico.**

Dear Sarah,

In regards of conditions for approval for the above captioned well, I would like to recap the New Mexico Oil Conservation Divisions' (NMOCD) requirement to drill the above captioned well.
This is for Nearburg Producing Company to take samples from the flow line of the drilling mud every 100' in order to determine the chloride levels from the surface to the casing setting depth of @ 1600'.
The data will need to be submitted to the NMOCD.
In addition for the condition of approval of said well, please be aware that the NMOCD will require that the Capitan Reef is to be drilled with a fresh water mud or air.
Please call our office if you have any questions regarding this matter.

Respectfully yours,

Bryan G. Arrant
PES

CC: Tim Gum-District Supervisor-Artesia