#### OPERATOR'S COFX

## **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004

6. If Indian, Allottee or Tribe Name

5. Lease Serial No.

# APPLICATION FOR PERMIT TO DRILL OR REENTER

|  |                  |                             |                            |                | ]   |   |
|--|------------------|-----------------------------|----------------------------|----------------|---|---|
| la. Type of Work: DRILL REENT  | ER               |                             |                            |                | 7. If Unit or CA Agreement,                                       | Name and No.                              |
| 1b. Type of Well: Oil Well Gas Well Other  | <b>☑</b> s       | ingle Zone                  | ☐ Multi                    | ple Zone       | 8. Lease Name and Well No.<br>Artemis Federal Com #2              | 34713                                     |
| 2. Name of Operator Nadel Gussman Permian, L.L.C. 155 615  | -                |                             |                            |                | 9. API Well No.<br>30-015- 34391                                  |   |
| 3a. Address  | 3b. Phone No     | o. (include a               | rea code)                  |                | 10. Field and Pool, or Explora                                    | tory                                      |
| 601 N. Marienfeld, TX 79701  | (432) 682-4      | 429                         |                            |                | Dublin Ranch Morrow 761   | 40)                                       |
| 4. Location of Well (Report location clearly and in accordance wit   | h any State requ | irements. *)                |                            |                | 11. Sec., T., R., M., or Blk. an                                  | d Survey or Area                          |
| At surface 1,200' FSL & 1,400' FEL SUBJECT  At proposed prod. zone 1,500' FSL & 1,980' FEL   | to like a        | pprova                      | L BY S                     |                | Sec. 33 T22S R28E<br>UL O<br>UL J                                 |   |
| 14. Distance in miles and direction from nearest town or post office*  |                  |                             |                            |                | 12. County or Parish  | 13. State                                 |
| South East of Carlsbad 7 miles.  |                  |                             |                            |                | Eddy County   | NM  |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1,200' FSL   | 16. No. of A     | Acres in leas               | e                          | •              | g Unit dedicated to this well<br>s South 1/2 Sec. 33              |   |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  3,251'   |                  | 19. Proposed Depth 20. BLM/ |                            |                | BIA Bond No. on file  | W. C. |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)  | 22. Approx       | imate date v                | work will s                | tart*          | 23. Estimated duration  |   |
| 3,044'   | October 15       |                             |                            |                | 47  |   |
|  | 24. Atta         | chments                     | (                          | CARLSBA        | D CONTROLLED WATE   | R BASIN                                   |
| The following, completed in accordance with the requirements of Onsi   | hore Oil and Gas | Order No.1,                 | shall be at                | tached to this | s form:   |   |
| <ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol> | m Lands, the     | ltem<br>5. Opera            | 20 above).<br>tor certific | ation.         | s unless covered by an existing<br>ormation and/or plans as may b |   |

authorized officer.

| 25. Signature  | Name (Printed Typed)   | Date  |  |  |  |  |
|--|--|---|--|--|--|--|
| M Fernan   | Josh Fernau  | 09/21/05                                    |  |  |  |  |
| Title Title  |  |   |  |  |  |  |
| Staff Engineer   |  | • •   |  |  |  |  |
| Approved by (Signature) . Land   | Name (Printed Typed)  Joe G. Lara  | Date 10 12 1/05                             |  |  |  |  |
| Title Acting FIELD MANAGER   | Office CARLSBAD FIELD OFFICE   |   |  |  |  |  |
| Application approved does not warrant or certify that the applicant hald | la facilità di contratti di alla di altri di contratti di | At the second decrease of the second second |  |  |  |  |

es 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

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 reverse)

APPROVAL SUBJECT TO **GENERAL REQUIREMENTS** AND SPECIAL STIPULATIONS **ATTACHED** 

WITNESS: 133/8" Coment Job

#### Exhibit #1

DISTRICT I 1625 M. French Dr., Hobb DISTRICT II 811 South First, Artesia, NM 88210

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

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

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

DISTRICT IV

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

| API Number    | Pool Code      | Pool Nam    | ne          |
|---------------|----------------|-------------|-------------|
| Property Code | Property 1     | lama        | Well Number |
| rioperty code | ARTEMIS FEDE   |             | 2           |
| OGRID No.     | Operator 1     | lame        | Elevation   |
| ,             | NADEL AND GUSS | MAN PERMIAN | 3044        |

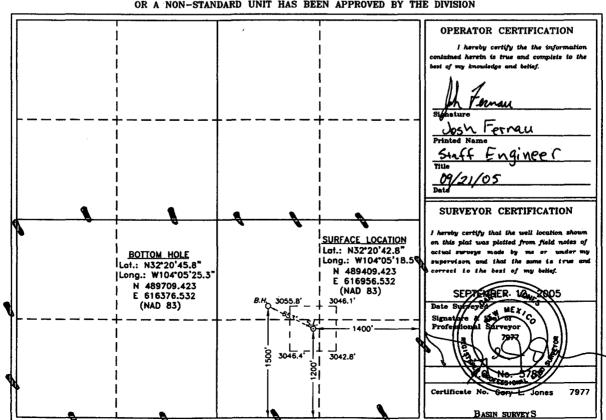
#### Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Peet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| 0             | 33      | 22 S     | 28 E  |         | 1200          | SOUTH            | 1400          | EAST           | EDDY   |

#### Bottom Hole Location If Different From Surface

| UL or lot No. | Section   | Township    | Range       | Lot ldn | ot Idn   Peet from the   North/South line   Feet from the   East/We |       | East/West line | County |      |
|---------------|-----------|-------------|-------------|---------|---|-------|----------------|--------|------|
| J             | 33        | 22 S        | 28 E        |         | 1500  | SOUTH | 1980           | EAST   | EDDY |
| 320           | s Joint o | r Infill Co | nsolidation | Code Or | der No.   |       |                |        |      |

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



District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III
1000 Rio Brazos Road, 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

For drilling and production facilities, submit to appropriate NMOCD District Office.

For downstream facilities, submit to Santa Fe office

Form C-144

June 1, 2004

1220 South St. Francis Dr. Santa Fe, NM 87505 Pit or Below-Grade Tank Registration or Closure

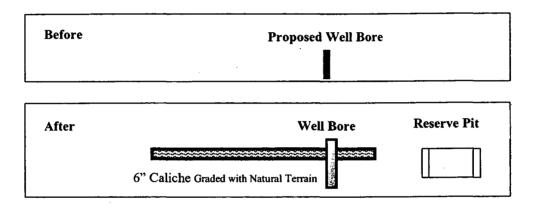
| Is pit or below-grade tand<br>Type of action: Registration of a pit o  | k covered by a "general plan"? Yes No<br>r below-grade tank Closure of a pit or below-grade  | ⊠<br>de tank □  |  |  |  |  |
|--|--|---|--|--|--|--|
| Operator:Nadel and Gussman Permian, LLCTelephone:432-68.  Address:601 N. Marienfeld, Suite 508 Midland, TX 70701  Facility or well name:Artemis Federal Com #2API #:30-015U  County:Eddy, NM LatitudeN32 deg 20' 42.8" Longitude W104  | 2-4429e-mail address:joshf@nagu  | ss.com  |  |  |  |  |
| Pit  Type: Drilling   Production   Disposal    Workover   Emergency    Lined   Unlined    Liner type: Synthetic   Thickness   12 mil   Clay    Pit Volume   20,000 bbl   | Below-grade tank  Volume:bbl Type of fluid:  Construction material:  Double-walled, with leak detection? Yes                         |   |  |  |  |  |
| Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)   | Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more   | (20 points) (10 points) ( 0 points)X  |  |  |  |  |
| Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)  | Yes<br>No  | (20 points)<br>( 0 points)X   |  |  |  |  |
| Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)  | Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more   | (20 points) (10 points)X ( 0 points)  |  |  |  |  |
|  | Ranking Score (Total Points)   | 10  |  |  |  |  |
| If this is a pit closure: (1) Attach a diagram of the facility showing the pit's your are burying in place) onsite  offsite  If offsite, name of facility remediation start date and end date. (4) Groundwater encountered: No  Y (5) Attach soil sample results and a diagram of sample locations and excavat | . (3) Attach a general d   | escription of remedial action taken including   |  |  |  |  |
| Additional Comments:   |  |   |  |  |  |  |
|  |  |   |  |  |  |  |
|  |  |   |  |  |  |  |
|  |  |   |  |  |  |  |
|  |  |   |  |  |  |  |
| I hereby certify that the information above is true and complete to the best has been/will be constructed or closed according to NMOCD guideline.  |  |   |  |  |  |  |
| Date:09/21/05  | Signature / Leman of relieve the operator of liability should the contents are operator of its responsibility for compliance with an | of the pit or tank contaminate ground water or<br>ny other federal, state, or local laws and/or |  |  |  |  |
| Approval: Field Supervisor   | Signature Signature  | OCT 2 1 2005  |  |  |  |  |

# 13 Point Land Use Plan

- 1. Existing Roads A small scale vicinity map is attached (Exhibit #4) which shows the location of this well in relation to an aerial view of surrounding townships and ranges. A larger scale topographical map is (Exhibit #5) shows the location of the well. From the junction of Co. Rd. 605 and Co. Rd. 607, go southeast on 605 for 1.4 mile to lease road; thence southwest on lease road for 0.8 mile; thence southwest on lease for 0.5 mile to proposed lease road.
- 2. <u>Planned Access Roads</u> An access road from the location to the nearest exit leaving the lease, which is shown on (Exhibit #3), will have to be constructed. The lease is not fenced and a cattle guard or gate may not be needed.
- 3. Location of Existing Wells The Artemis Federal #1, operated by Nadel and Gussman Permian, LLC is located in Section 33, T22S-R28E, 1,650' FSL & 660' FWL. The Harroun Com #1, operated by Unit Petroleum is located in Section 33, T22S-R28E 660' FNL & 1,980'FEL. The Harroun Com #2, operated by Unit Petroleum is located in Section 33, T22S-R28E 660' FNL & 1,000'FWL. The Schalk Federal Com 33 #1 is located in Section 33, T22S-R28E 660' FSL and 1,980' FEL, which is P & A.
- 4. Location of Tank Batteries, Production Facilities & Lines -
  - We anticipate gas production from the Atoka and Morrow, with possible volumes of produced oil
    or water. We will build a battery with a minimum of two 210 Bbl steel tanks, one for oil and one
    for water.
  - Pipe lines will be used to transport the sales of the natural gas using the access road to location.
  - We will also have a line heater and separator on location. All produced fluids from the Atoka or Morrow will be hauled off lease by road. There are no initial plans for oil pipelines, LACT units or SWD lines.
  - We do not anticipate a need for electrical service on the lease at this time.
- 5. <u>Location & Type- of Water Supply</u> Fresh water will be supplied by neighboring water well and salt water will be trucked from the most economical location by a third- party contractor.
- 6. <u>Source of Construction Material</u> Primary source of caliche will be the closest most economical existing federal pit preceded by the proper documentation and approval.

- 7. Methods of Handling Waste Disposal A lined reserve pit will be dug to handle drill cuttings and fluids. The pit will be lined in accordance with BLM specifications. After sufficient time has elapsed to allow drilling fluids to dry, all pits will be closed and leveled. All trash and debris will be removed from the location.
- 8. Ancillary Facilities There are no camps or airstrips planned.
- 9. Well Site Layout The well site (see Exhibit #1 NMOCD C-102 Form) has been staked and is also indicated on the enclosed maps (Exhibits #1, #3, #4 & #5). The drilling site is mainly Upton soils with gray sandy loams intermixed with gravels and cobbles. The drilling pad will be graded covered by 6" caliche and native rock from grade cut. The drilling pad will blend in with the terrain since the topography is generally flat.

Cross section – Before and after is shown below:



#### 10. Plans for Restoration of Surface - Commercial Well:

- Reshaped Topography Rubbish will be hauled off upon completion of drilling operations. All future rubbish will be removed by the subcontractor generating same.
- <u>Caliche Pad</u> Caliche drilling pad will remain intact until well is abandoned.
- Road The road will remain intact as long as there is production on the lease.
- <u>Timetable</u> This well is expected to produce for several years.
- <u>Plans for Restoration of Surface</u> <u>Plugged and Abandoned Well</u>:
   Surface will be restored in accordance with all regulations in effect at the time of abandonment.

#### 11. Other Information -

- <u>Topography</u> The proposed well location is on a bluff overlooking the Pecos River.
- Soil Characteristics Upton soils with gray sandy loams intermixed with gravels and cobbles.
- <u>Flora</u> Vegetation is scrub mesquite, four-wing saltbush, creosote bush, prickly pear cactus, snakeweed, and sparse grasses. There is an estimated 70% surface visibility.
- Fauna rabbits, mice, rats, birds, dear and snakes
- Other Surface Use Activities N/A

- Surface Ownership BLM.
- Water Wells No water wells within 1000' of the location.
- <u>Lakes, Streams, Ponds</u> The Pacos River is at an average distance of less than 1,000' (Exhibit #5).
- <u>Dwellings</u> There are no inhabited structure within 1000' of the location.
- <u>Archeological Summary</u> It is recommended that construction of the proposed well location and access road precede without any additional cultural resource investigations.
- 12. Operator's Representative -

| Joel Martin   | Office Phone | (432) 682-4429 |
|---------------|--------------|----------------|
|               | Home Phone   | (432) 694-2569 |
|               | Mobile Phone | (432) 238-9969 |
| Josh Fernau   | Office Phone | (432) 682-4429 |
|               | Home Phone   | (806) 978-1523 |
|               | Mobile Phone | (432) 238-2874 |
| Teddy Rowland | Office Phone | (505) 746-1428 |
|               | Home Phone   | (505) 746-4970 |
|               | Mobile Phone | (505) 513-1499 |

13. Certification - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drilling site and access route; that I am familiar with the condition which presently exists; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by a construction company or their contractors and sub-contractors in conformity with this plan.

Josh Fernau

Staff Engineer Date: 09/21/05

# 13 Point Drilling Plan:

- 1. <u>Location</u>: (SHL) 1,200' FSL & 1,400' FEL, UL O Sec. 33, T-22-S, R-28-E, (BHL) (BHL) 1,500' FSL & 1,980' FEL, UL J Sec. 33, T-22-S, R-28-E, Eddy County, New Mexico (Form C-102).
- 2. Elevation: 3,044' GL.
- 3. Geological Name of Surface Formation: Upton Soils located on a bluff overlooking the Pecos River.
- 4. Type of Drilling Tools to be utilized: Rotary Tools.
- 5. Proposed Drilling Depth: 12,900'.
- 6. Tops of Important Geological Markers:

| Delaware     | 2,620' | Canyon | 10,074' | Atoka Clastics | 11,396' |
|--------------|--------|--------|---------|----------------|---------|
| Bone Springs | 6,030' | Strawn | 10,884' | Morrow         | 11,519' |
| Wolfcamp     | 9,529' | Atoka  | 11,154' | Lower Morrow   | 12,433' |

7. Estimated Depth of Anticipated Water, Oil or Gas:

| Oil | -Delaware       | 2,620'  |
|-----|-----------------|---------|
| Oil | -Bone Spring    | 0,030'  |
| Oil | -Wolfcamp       | 9,529'  |
| Gas | -Atoka Clastics | 11,396' |
| Gas | -Lower Morrow   | 12.433' |

## 8. Casing Program:

| Hole Size | <u>Interval</u> | OD Casing | Weight Grade Jt.       | Cement     |
|-----------|-----------------|-----------|------------------------|------------|
| 17 ½"     | 0-300'          | 13 3/8"   | 48# H-40               | Surface    |
| 12 ¼"     | 0-6,100'        | 9 5/8" ·  | 40# N-80 and P-110     | Surface    |
| 8 3/4"    | 0-12,900'       | 5 ½"      | 17# S-95 and 20# P-110 | TOC 4,500' |

9. Specifications for Pressure Control Equipment: (Exhibit #6)

This rig will have a 13 5/8" 5M BOP Shaffer with pipe rams and blind rams, kill line, 10,000 psi choke manifold, Camron hydraulic controls, and accumulator with remote controls. When setting up, will test BOP and choke to 1,500psi with 3<sup>rd</sup> party tester, will operate BOP once a day or as directed by the company representative. The surface and intermediate will be witnessed by a BLM representative.

### 10. Mud Program:

The well will be drilled to TD with a combination of brine, cut brine, and XCD Polymer mud system.

| <u>Depth</u> | <u>Type</u> | $\underline{\mathbf{Wt}}$ | Viscosity | <u>Waterloss</u> |
|--------------|-------------|---------------------------|-----------|------------------|
| 0-300'       | FW          | 8.5#                      | 40-45     | NC               |
| 300'-6,100'  | CB          | 10.0#                     | 30-32     | NC               |
| 6,100'-TD    | CB/XCDPLY   | 8.8-10.0#                 | 32-45     | 10               |

### 11. Testing, Logging & Coring Program:

- a. Testing: No DST's are expected.
- b. Coring: no coring is planned.
- c. Logging: open hole logs will be run prior to running production casing. The standard suite will be a Dual Lateral/ ML and GR/Density/Neutron combination.
- d. Depending on the sand quality, a FMI and/or formation tester may be run.
- e. Open hole logs will not be run through the surface hole section.

### 12. Potential Hazards:

No significant hazards are expected. Lost circulation may occur, no  $H_2S$  expected, but the operator will utilize a  $3^{rd}$  party  $H_2S$  monitoring package from 6,100' to TD.

## 13. Anticipated Starting Date & Duration:

Plans are to begin drilling operations about October 15, 2005, approximately 47 days will be required to drill the well and 10 days will be needed for the completion.

Josh Fernau Staff Engineer

Date: 09/21/05

## Hydrogen Sulfide Drilling Operations Plan

- 1. Company and Contract personnel admitted on location should be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S.
  - B. Physical Effects and Hazards.
  - C. Proper Use of Safety Equipment and Life Support Systems.
  - D. Principle and Operation of H<sub>2</sub>S Detectors, Warning System and Briefing.
  - E. Evacuation Procedure, Routes and First Aid.
  - F. Proper Use of 30 minute Pressure Demand Air Pack.

## 2. H<sub>2</sub>S Detection and Alarm Systems

- A. H<sub>2</sub>S Detectors and Audio Alarm System to be Located at Bell Nipple, End of Blooie Line (mud pit) and on Derrick floor or doghouse.
- 3. Windsock and/or Wind Streamers
  - A. Windsock at Mud Pit Area Should be High Enough to be Visible.
  - B. Windsock at Briefing Area Should be High Enough to be Visible.
  - C. There Should be a Windsock at Entrance to Location.
- 4. Condition Flags and Signs
  - A. Warning Sign on Access Road to Location.
  - B. Flags to be Displayed on Sign at Entrance to Location.
    - 1. Green Flag, Normal Safe Condition.
    - 2. Yellow Flag, Indicates Potential Pressure and Danger.
    - 3. Red Flag, Danger H<sub>2</sub>S Present in Dangerous Concentration Only Emergency Personnel Admitted to Location.
- 5. Well Control Equipment
  - A. See Exhibit #6.
- 6. Communication
  - A. While Working Under Masks Chalkboards Will be Used for Communication.
  - B. Hand Signals will be Used Where Chalk Board is Inappropriate.
  - C. Two Way Radio or Cell Phone will be Used to Communicate off Location in Case of Available at Most Drilling Foreman's Trailer or Living Quarters.
- 7. Drillstem Testing
  - A. Exhausts will be Watered.
  - B. Flare Line will be Equipped with an Electric Igniter or a propane pilot light in case gas reaches the surface.
  - C. If Location is near any Dwelling a Closed DST will be Performed.
- 8. Drilling Contractor Supervisor will be Required to be Familiar with the Effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.
- 9. If H<sub>2</sub>S Encountered, Mud system will be Altered if Necessary to Maintain Control of Formation. A Mud Gas Separator will be Brought into Service Along with H<sub>2</sub>S Scavengers if Necessary.

Date: 9/20/2005 Time: 09:20:26 Co-ordinate(NE) Reference: Well: 2, Grid North Page: 1 Company: Nadel & Gussman Artemis Fed. Com #2 Field: Artemis Federal Com #2 Vertical (TVD) Reference: SITE 0.0 Site: Section (VS) Reference: User (0.00N,0.00E,297.35Azi) Well: Plan #3 Plan: Wellpath: Field: Artemis Fed. Com #2 New Mexico, Eastern Zone Map System: US State Plane Coordinate System 1983 Map Zone: Geo Datum: GRS 1980 Coordinate System: Well Centre Geomagnetic Model: iarf2005 Sys Datum: Mean Sea Level Artemis Federal Com #2 Site: Sec 33, T22S, R28E 32 20 42.800 N 489411.21 ft Latitude: Site Position: Northing: 104 18.500 W Geographic 616957.08 ft Longitude: Easting: From: North Reference: Grid Position Uncertainty: 0.00 ft 0.13 deg Ground Level: 0.00 ft **Grid Convergence:** Well: Slot Name: +N/-S 489411.21 ft Latitude: 32 20 42.800 N Well Position: 0.00 ft Northing: Easting: 616957.08 ft 104 5 18.500 W +F/-W 0.00 ft Longitude: **Position Uncertainty:** 0.00 ft **Drilled From:** Surface Wellpath: Tie-on Depth: 0.00 ft Mean Sea Level **Above System Datum:** 0.00 ft **Current Datum:** SITE Height Magnetic Data: 9/14/2005 Declination: 8.50 deg Field Strength: 49245 nT Mag Dip Angle: 60.35 deg Direction Vertical Section: Depth From (TVD) +N/-S +F/-W ft ft deg 0.00 297.35 0.00 0.00 Date Composed: 9/20/2005 Plan: Plan #3 Version: Tied-to: User Defined Principal: No Plan Section Information MD +E/-W DLS Build Turn TFO Target Incl TVD +N/-S Azim deg/100ft deg/100ft deg/100ft deg deg ft ft deg 0.00 0.00 8700.00 0.00 297.35 8700.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 8750.00 297.35 8750.00 0.00 0.00 9296.44 9.56 9293.90 20.90 -40.41 1.75 1.75 0.00 297.35 297.35 BHL 12953.35 9.56 297.35 300.00 -580.01 0.00 0.00 0.00 0.00 12900.00 Section 1: Start Hold TFO MD TVD +N/-S +E/-W VS DLS Build Turn Incl Azim deg deg/100ft deg/100ft deg/100ft deg ft ft ft ft deg ft 0.00 0.00 8700.00 0.00 297.35 8700.00 0.00 0.00 0.00 0.00 0.00 297.35 8750.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 297.35 8750.00 Section 2: Start Build 1.75 MD Incl Azim TVD +N/-S +E/-W VS DLS Build TFO deg deg/100ft deg/100ft deg/100ft deg ft ft ft deg ff ft 8800.00 0.88 297.35 -0.34 0.38 1.75 1.75 0.00 0.00 8800.00 0.18 8900.00 0.00 263 297.35 8899.95 1.58 -3.053 44 1.75 1.75 0.00 9000.00 9.54 4.38 297.35 8999.76 4.38 -8.471.75 1.75 0.00 0.00 9100.00 6.13 18.69 0.00 0.00 297.35 9099.33 8.59 -16.60 1.75 1.75 9200.00 7.88 297.35 -27 42 30.88 1.75 0.00 0.00 9198.58 14.19 1 75 9296.44 9.56 45.49 0.00 0.00 297.35 9293.90 20.90 -40.411.75 1.75 Section 3: Start Hold MD Inci +N/-S +E/-W VS DLS Build TFO Azim TVD Turn deg/100ft deg/100ft deg/100ft ft deg deg ft ft. ft ft deg 297.35 21.17 9300.00 9.56 -40.93 46.09 0.00 0.00 0.00 9297.42 0.00 9400.00 9.56 0.00 297.35 9396.03 28.81 -55.69 62,70 0.00 0.00 0.00

Company: Nadel & Gussman
Field: Artemis Fed: Com #2
Site: Artemis Federal Com #2

Site: Well: Wellpath: Date: 9/20/2005 Time: 09:20:26
Co-ordinate(NE) Reference: Well: 2, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: User (0.00N,0.00E,297.35Azi)
Plan: Plan #3

Page:

2

Section 3 : Start Hold

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W   | VS ft  | DLS<br>deg/100f | Build<br>t deg/100ft | Turn<br>dea/100ft | TFO deg |
|----------|-------------|-------------|-----------|-------------|---------|--------|-----------------|----------------------|-------------------|---------|
| 9500.00  |             | 297.35      | 9494.64   | 36.44       | -70.45  | 79.31  | 0.00            | 0.00                 | 0.00              | 0.00    |
| 9600.00  |             | 297.35      | 9593.25   | 44.07       | -85.20  | 95.92  | 0.00            | 0.00                 | 0.00              | 0.00    |
| 9700.00  |             | 297.35      | 9691.86   | 51.70       | -99.96  | 112.54 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 9800.00  |             | 297.35      | 9790.47   | 59.33       | -114.71 | 129.15 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 9900.00  |             | 297.35      | 9889.08   | 66.97       | 129.47  | 145.76 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 10000.00 |             | 297.35      | 9987.69   | 74.60       | -144.22 | 162.37 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 10100.00 |             | 297.35      | 10086.30  | 82.23       | -158.98 | 178.99 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 10200.00 |             | 297.35      | 10184.91  | 89.86       | -173.73 | 195.60 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 10300.00 |             | 297.35      | 10283.52  | 97.50       | -188.49 | 212.21 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 10400.00 |             | 297.35      | 10382.13  | 105.13      | -203.25 | 228.82 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 10500.00 |             | 297.35      | 10480.74  | 112.76      | -218.00 | 245.44 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 10600.00 |             | 297.35      | 10579.35  | 120.39      | -232.76 | 262.05 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 10700.00 |             | 297.35      | 10677.96  | 128.02      | -247.51 | 278.66 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 10800.00 |             | 297.35      | 10776.57  | 135.66      | -262.27 | 295.27 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 10900.00 | 9.56        | 297.35      | 10875.18  | 143.29      | -277.02 | 311.89 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 11000.00 | 9.56        | 297.35      | 10973.80  | 150.92      | -291.78 | 328.50 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 11100.00 | 9.56        | 297.35      | 11072.41  | 158.55      | -306.53 | 345.11 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 11200.00 | 9.56        | 297.35      | 11171.02  | 166.19      | -321.29 | 361.72 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 11300.00 | 9.56        | 297.35      | 11269.63  | 173.82      | -336.05 | 378.34 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 11400.00 | 9.56        | 297.35      | 11368.24  | 181.45      | -350.80 | 394.95 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 11500.00 | 9.56        | 297.35      | 11466.85  | 189.08      | -365.56 | 411.56 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 11600.00 |             | 297.35      | 11565.46  | 196.71      | -380.31 | 428.17 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 11700.00 | 9.56        | 297.35      | 11664.07  | 204.35      | -395.07 | 444.79 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 11800.00 | 9.56        | 297.35      | 11762.68  | 211.98      | -409.82 | 461.40 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 11900.00 | 9.56        | 297.35      | 11861.29  | 219.61      | -424.58 | 478.01 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12000.00 |             | 297.35      | 11959.90  | 227.24      | -439.33 | 494.62 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12100.00 | 9.56        | 297.35      | 12058.51  | 234.88      | -454.09 | 511.24 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12200.00 | 9.56        | 297.35      | 12157.12  | 242.51      | -468.85 | 527.85 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12300.00 | 9.56        | 297.35      | 12255.73  | 250.14      | -483.60 | 544.46 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12400.00 | 9.56        | 297.35      | 12354.34  | 257.77      | -498.36 | 561.07 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12500.00 | 9.56        | 297.35      | 12452.95  | 265.40      | -513.11 | 577.69 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12600.00 | 9.56        | 297.35      | 12551.56  | 273.04      | -527.87 | 594.30 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12700.00 | 9.56        | 297.35      | 12650.17  | 280.67      | -542.62 | 610.91 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12800.00 | 9.56        | 297.35      | 12748.78  | 288.30      | -557.38 | 627.53 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12900.00 | 9.56        | 297.35      | 12847.39  | 295.93      | -572.13 | 644.14 | 0.00            | 0.00                 | 0.00              | 0.00    |
| 12953.35 | 9.56        | 297.35      | 12900.00  | 300.00      | -580.01 | 653.00 | 0.00            | 0.00                 | 0.00              | 0.00    |

| C   |      |
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| -50 | rvev |

| Survey   |             |             | _         |             |         |          |                 |                     |                     |              |
|----------|-------------|-------------|-----------|-------------|---------|----------|-----------------|---------------------|---------------------|--------------|
| MD<br>ft | Inci<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W   | VS<br>ft | DLS<br>deg/100f | Build<br>t deg/100f | Turn<br>t deg/100ft | Tool/Comment |
| 8700.00  | 0.00        | 297.35      | 8700.00   | 0.00        | 0.00    | 0.00     | 0.00            | 0.00                | 0.00                |              |
| 8750.00  | 0.00        | 297.35      | 8750.00   | 0.00        | 0.00    | 0.00     | 0.00            | 0.00                | 0.00                |              |
| 8800.00  | 0.88        | 297.35      | 8800.00   | 0.18        | -0.34   | 0.38     | 1.75            | 1.75                | 0.00                |              |
| 8900.00  | 2.63        | 297.35      | 8899.95   | 1.58        | -3.05   | 3.44     | 1.75            | 1.75                | 0.00                |              |
| 9000.00  | 4.38        | 297.35      | 8999.76   | 4.38        | -8.47   | 9.54     | 1.75            | 1.75                | 0.00                |              |
| 9100.00  | 6.13        | 297.35      | 9099.33   | 8.59        | -16.60  | 18.69    | 1.75            | 1.75                | 0.00                |              |
| 9200.00  | 7.88        | 297.35      | 9198.58   | 14.19       | -27.42  | 30.88    | 1.75            | 1.75                | 0.00                |              |
| 9296.44  | 9.56        | 297.35      | 9293.90   | 20.90       | -40.41  | 45.49    | 1.75            | 1.75                | 0.00                | 4            |
| 9300.00  | 9.56        | 297.35      | 9297.42   | 21.17       | -40.93  | 46.09    | 0.00            | 0.00                | 0.00                |              |
| 9400.00  | 9.56        | 297.35      | 9396.03   | 28.81       | -55.69  | 62.70    | 0.00            | 0.00                | 0.00                |              |
| 9500.00  | 9.56        | 297.35      | 9494.64   | 36.44       | -70.45  | 79.31    | 0.00            | 0.00                | 0.00                |              |
| 9600.00  | 9.56        | 297.35      | 9593.25   | 44.07       | -85.20  | 95.92    | 0.00            | 0.00                | 0.00                |              |
| 9700.00  | 9.56        | 297.35      | 9691.86   | 51.70       | -99.96  | 112.54   | 0.00            | 0.00                | 0.00                |              |
| 9800.00  | 9.56        | 297.35      | 9790.47   | 59.33       | -114.71 | 129.15   | 0.00            | 0.00                | 0.00                |              |
| 9900.00  | 9.56        | 297.35      | 9889.08   | 66.97       | -129.47 | 145.76   | 0.00            | 0.00                | 0.00                |              |
| 10000.00 | 9.56        | 297.35      | 9987.69   | 74.60       | -144.22 | 162.37   | 0.00            | 0.00                | 0.00                |              |
| 10100.00 | 9.56        | 297.35      | 10086.30  | 82.23       | -158.98 | 178.99   | 0.00            | 0.00                | 0.00                |              |
| 10200.00 | 9.56        | 297.35      | 10184.91  | 89.86       | -173.73 | 195.60   | 0.00            | 0.00                | 0.00                |              |
| 10300.00 | 9.56        | 297.35      | 10283.52  | 97.50       | -188.49 | 212.21   | 0.00            | 0.00                | 0.00                |              |
| 10400.00 | 9.56        | 297.35      | 10382.13  | 105.13      | -203.25 | 228.82   | 0.00            | 0.00                | 0.00                |              |

Company: Nadel & Gussman
Field: Artemis Fed. Com #2
Site: Artemis Federal Com #2
Well: 2

Date: 9/20/2005 Time: 09:20:26
Co-ordinate(NE) Reference: W6II: 2, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: User (0.00N,0.00E,297.35Azi)
Plan: Plan #3

Page:

3

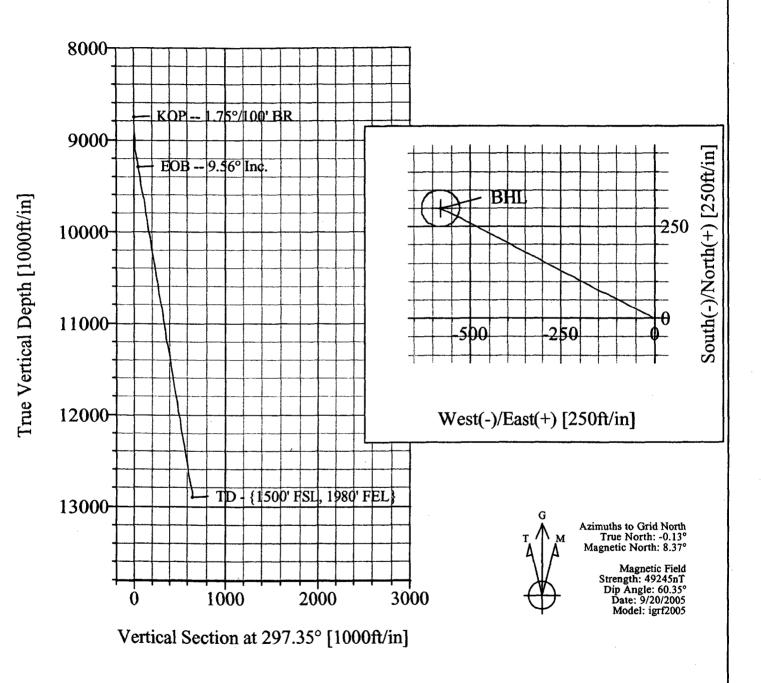
Wellpath: 1

|      | <br> | <br> | <br> |  |
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| Survey   |             |             |           |             |         |          |                  |                    |                   |              |
|----------|-------------|-------------|-----------|-------------|---------|----------|------------------|--------------------|-------------------|--------------|
| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W   | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | Tool/Comment |
| 10500.00 | 9.56        | 297.35      | 10480.74  | 112.76      | -218.00 | 245.44   | 0.00             | 0.00               | 0.00              |              |
| 10600.00 | 9.56        | 297.35      | 10579.35  | 120.39      | -232.76 | 262.05   | 0.00             | 0.00               | 0.00              |              |
| 10700.00 | 9.56        | 297.35      | 10677.96  | 128.02      | -247.51 | 278.66   | 0.00             | 0.00               | 0.00              |              |
| 10800.00 | 9.56        | 297.35      | 10776.57  | 135.66      | -262.27 | 295.27   | 0.00             | 0.00               | 0.00              |              |
| 10900.00 | 9.56        | 297.35      | 10875.18  | 143.29      | -277.02 | 311.89   | 0.00             | 0.00               | 0.00              |              |
| 11000.00 | 9.56        | 297.35      | 10973.80  | 150.92      | -291.78 | 328.50   | 0.00             | 0.00               | 0.00              |              |
| 11100.00 | 9.56        | 297.35      | 11072.41  | 158.55      | -306.53 | 345.11   | 0.00             | 0.00               | 0.00              |              |
| 11200.00 | 9.56        | 297.35      | 11171.02  | 166.19      | -321.29 | 361.72   | 0.00             | 0.00               | 0.00              |              |
| 11300.00 | 9.56        | 297.35      | 11269.63  | 173.82      | -336.05 | 378.34   | 0.00             | 0.00               | 0.00              |              |
| 11400.00 | 9.56        | 297.35      | 11368.24  | 181.45      | -350.80 | 394.95   | 0.00             | 0.00               | 0.00              |              |
| 11500.00 | 9.56        | 297.35      | 11466.85  | 189.08      | -365.56 | 411.56   | 0.00             | 0.00               | 0.00              |              |
| 11600.00 | 9.56        | 297.35      | 11565.46  | 196.71      | -380.31 | 428.17   | 0.00             | 0.00               | 0.00              |              |
| 11700.00 | 9.56        | 297.35      | 11664.07  | 204.35      | -395.07 | 444.79   | 0.00             | 0.00               | 0.00              |              |
| 11800.00 | 9.56        | 297.35      | 11762.68  | 211.98      | -409.82 | 461.40   | 0.00             | 0.00               | 0.00              |              |
| 11900.00 | 9.56        | 297.35      | 11861.29  | 219.61      | -424.58 | 478.01   | 0.00             | 0.00               | 0.00              |              |
| 12000.00 | 9.56        | 297.35      | 11959.90  | 227.24      | -439.33 | 494.62   | 0.00             | 0.00               | 0.00              |              |
| 12100.00 | 9.56        | 297.35      | 12058.51  | 234.88      | -454.09 | 511.24   | 0.00             | 0.00               | 0.00              |              |
| 12200.00 | 9.56        | 297.35      | 12157.12  | 242.51      | -468.85 | 527.85   | 0.00             | 0.00               | 0.00              |              |
| 12300.00 | 9.56        | 297.35      | 12255.73  | 250.14      | -483.60 | 544.46   | 0.00             | 0.00               | 0.00              |              |
| 12400.00 | 9.56        | 297.35      | 12354.34  | 257.77      | -498.36 | 561.07   | 0.00             | 0.00               | 0.00              |              |
| 12500.00 | 9.56        | 297.35      | 12452.95  | 265.40      | -513.11 | 577.69   | 0.00             | 0.00               | 0.00              |              |
| 12600.00 | 9.56        | 297.35      | 12551.56  | 273.04      | -527.87 | 594.30   | 0.00             | 0.00               | 0.00              |              |
| 12700.00 | 9.56        | 297.35      | 12650.17  | 280.67      | -542.62 | 610.91   | 0.00             | 0.00               | 0.00              |              |
| 12800.00 | 9.56        | 297.35      | 12748.78  | 288.30      | -557.38 | 627.53   | 0.00             | 0.00               | 0.00              |              |
| 12900.00 | 9.56        | 297.35      | 12847.39  | 295.93      | -572.13 | 644.14   | 0.00             | 0.00               | 0.00              |              |
| 12953.35 | 9.56        | 297.35      | 12900.00  | 300.00      | -580.01 | 653.00   | 0.00             | 0.00               | 0.00              |              |

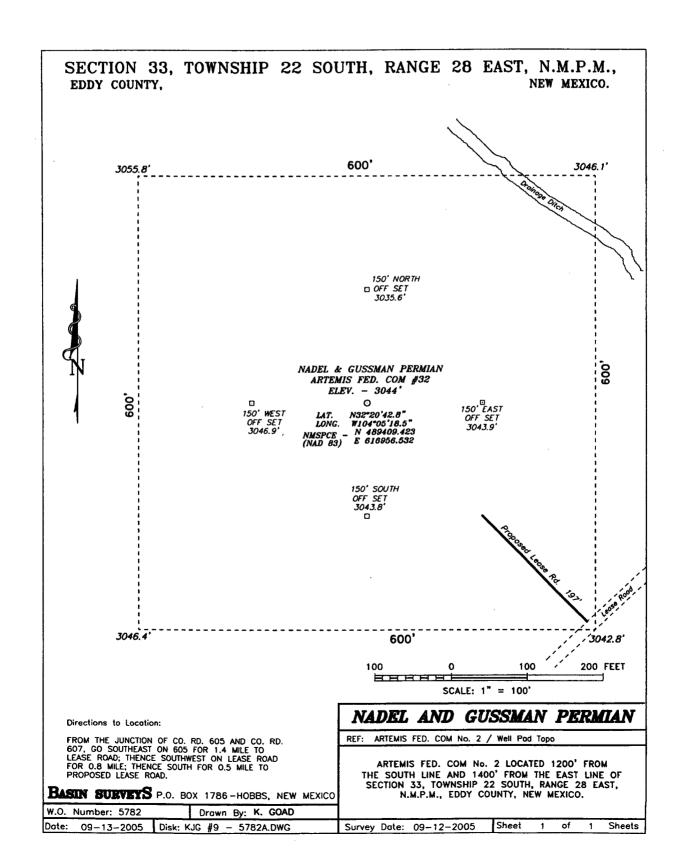


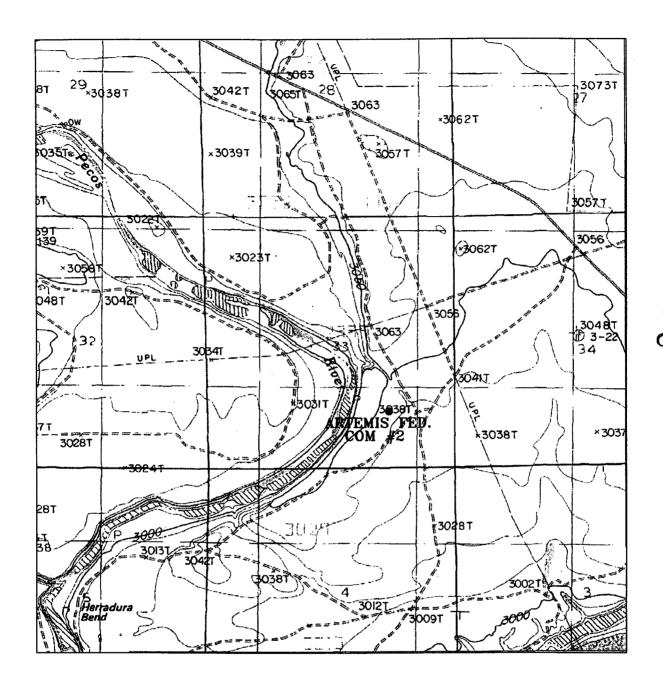
# NADEL & GUSSMAN ARTEMIS FEDERAL COM #2 Eddy County, NM 10° Max Angle



|                  | SECTION DETAILS                           |                              |                                      |   |                                 |                                   |                              |                                |                                 |        |
|------------------|---|------------------------------|--------------------------------------|---|---------------------------------|-----------------------------------|------------------------------|--------------------------------|---------------------------------|--------|
| Sec              | MD  | Inc                          | Azi                                  | TVD                                       | +N/-S                           | +E/-W                             | DLeg                         | TFace                          | VSec                            | Target |
| 1<br>2<br>3<br>4 | 8700.00<br>8750.00<br>9296.44<br>12953.35 | 0.00<br>0.00<br>9.56<br>9.56 | 297.35<br>297.35<br>297.35<br>297.35 | 8700.00<br>8750.00<br>9293.90<br>12900.00 | 0.00<br>0.00<br>20.90<br>300.00 | 0.00<br>0.00<br>-40.41<br>-580.01 | 0.00<br>0.00<br>1.75<br>0.00 | 0.00<br>0.00<br>297,35<br>0.00 | 0.00<br>0.00<br>45.49<br>653.00 | BHL    |

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ARTEMIS FEDERAL COM #2 Located at 1200' FSL and 1400' FEL Section 33, Township 22 South, Range 28 East, N.M.P.M., Eddy County, New Mexico.

Date: 09-13-2005

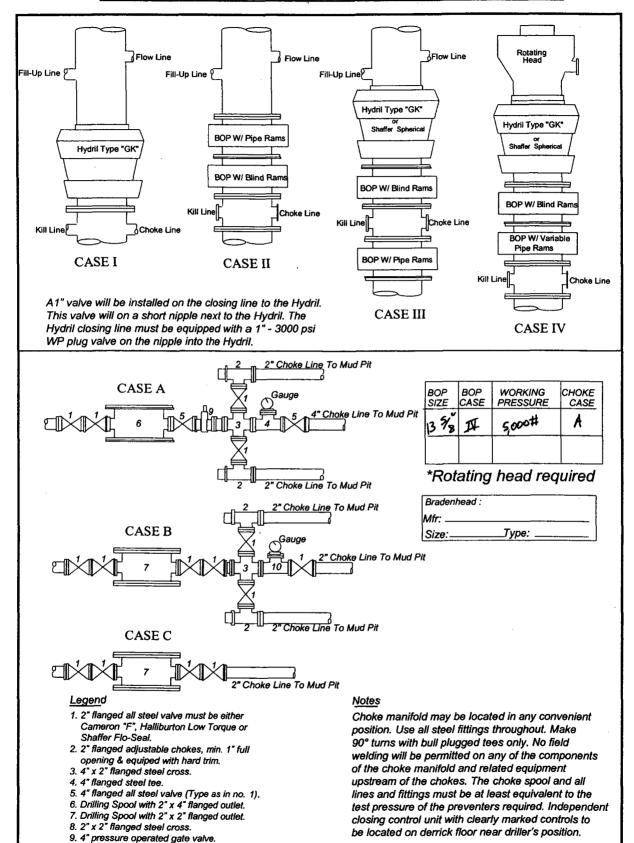


P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-3074 - Fax basinsurveys.com

| W.O. Number:   | 5782AA - KJG #1 |
|----------------|-----------------|
| Survey Date:   | 09-12-2005      |
| Scale: 1" = 20 | 000'            |

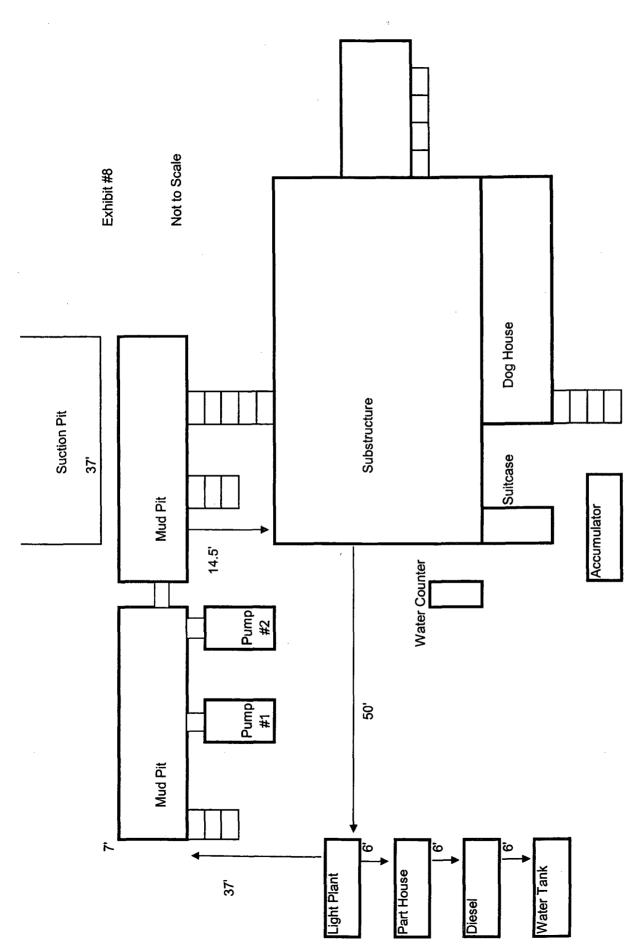
NADEL AND GUSSMAN PERMIAN, L.L.C.

# 

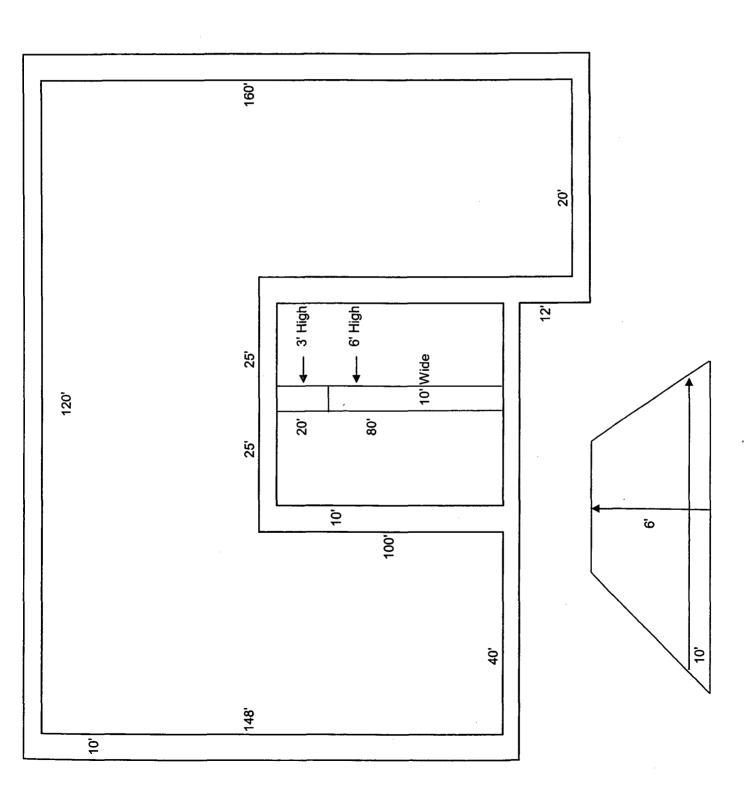


(10-31-96) WTXBOPS.PPT

10. 2" flanged steel tee.



/ s = x\*



#### CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

NADEL GUSSMAN PERMIAN, L.L.C.

Well Name & No.

2 - ARTEMIS FEDERAL COM

Location:

1200' FSL & 1400' FEL – SEC 33 – T22S – R28E – EDDY COUNTY (SHL) 1500' FSL & 1980' FEL – SEC 33 – T22S – R28E – EDDY COUNTY (BHL)

Lease: NM-19842-A

## I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

- A. Spudding
- B. Cementing casing: 13-3/8 inch 9-5/8 inch 5-1/2 inch
- C. BOP tests
- 2 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.
- 3. 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.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

#### II. CASING:

- 1. The <u>13-3/8</u> inch surface casing shall be set at <u>300 feet</u>, below usable water 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 <u>9-5/8</u> inch intermediate casing is <u>circulate cement to</u> the surface.
- 4. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>cement shall extend</u> <u>upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.</u>

#### 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 <u>3-3/8</u> 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) required for drilling the surface and intermediate casing shall be **2000** psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the **9-5/8** inch casing 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.
- BOPE must be tested prior to drilling into the **Wolfcamp** Formation by an independent service company.

#### **IV. DRILLING MUD:**

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

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