

N.M. Oil Cons. Div-Dist.
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(August 1999)

402

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

Under: Richard Knub; Atocha - Morado

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

| | | |
|---|--|---|
| 1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. NM-101076 |
| 1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone | | 6. If Indian, Allottee or Tribe Name N/A |
| 2. Name of Operator DAVID H. ARRINGTON OIL & GAS, INC. 5898 | | 7. If Unit or CA Agreement, Name and No. N/A 29673 |
| 3a. Address PO Box 2071, MIDLAND, TX 79702 | | 8. Lease Name and Well No. Fed Com GOLDSTONEFLY 12' #1 |
| 3b. Phone No. (include area code) 915. 682. 6685 | | 9. API Well No. NA 30-015-32260 |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 665' FSL & 1032' FWL At proposed prod. zone UH M | | 10. Field and Pool, or Exploratory Atocha - Morado |
| 14. Distance in miles and direction from nearest town or post office* 9.3 MILES WEST OF ATOCHA | | 11. Sec., T., R., M., or Blk. and Survey or Area Sec 12, T18S - R24E |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 665' | 16. No. of Acres in lease 320 | 12. County or Parish EDDY |
| 17. Spacing Unit dedicated to this well 300 | 13. State NM | |
| 18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft. | 19. Proposed Depth 9000' | 20. BLM/BIA Bond No. on file VIB 000 5938 |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3673' GL | 22. Approximate date work will start* 5.01.02 | 23. Estimated duration 40-45 DAYS |
| 24. Attachments | | |

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

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

| | | |
|--|--|------------------|
| 25. Signature <i>Danny H. Ledford</i> | Name (Printed/Typed) DANNY H. LEDFORD | Date 03.11.02 |
|--|--|------------------|

| | | |
|---|-------------------------------------|---------------------|
| Approved by (Signature) <i>Joe G. Lara</i> | Name (Printed/Typed) JOE G. LARA | Date APR 12 2002 |
| Title ACTING FIELD MANAGER | Office CARLSBAD FIELD OFFICE | |

Application approval does not warrant or certify the 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 reverse)



APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

DAVID H. ARRINGTON OIL & GAS, INC.

P.O. BOX 2071 , MIDLAND, TEXAS 79702
OFF (915) 682-6685
FAX (915) 682-4139

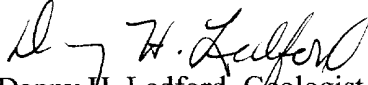
Mr. Joe G. Lara
U.S. Department of the Interior
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220

Re: Goldstonefly Fed. Com. "12" #1
Section 12, T18S-R24E
Eddy County, NM
NM-101076

Dear Mr. Lara:

This letter is to advise you that we have reached a surface agreement with Yates Petroleum concerning the aforementioned well to be drilled on their 4 Dinkus Ranch. This agreement was negotiated with their agent Chuck Moran. He can be contacted via phone at 505-748-1471 or in person at Yates Petroleum, 105 S. 4th St., Artesia, NM, 88210.

Sincerely,


Danny H. Ledford, Geologist
Operations & Development



Drilling Plan

for

David H. Arrington Oil & Gas, Inc.'s
GOLDSTONEFLY FEDERAL COM "12" #1

885' fsl & 1032' fwt (lot # M)
Section 12, T18S-R24E, N.M.P.M.
Eddy County, New Mexico

Lease Serial # USANMMN 101076

Surface Formation: Guadalupian Age Grayburg/San Andres

Estimated Tops of Geologic Markers:

| | | |
|------------|---|-------|
| San Andres | @ | 275' |
| Glorieta | @ | 1720' |
| Abo | @ | 3910' |
| Wolfcamp | @ | 5030' |
| Cisco | @ | 6150' |
| Canyon | @ | 7150' |
| Strawn | @ | 7675' |
| Atoka | @ | 7925' |
| Morrow | @ | 8150' |
| Miss. | @ | 8475' |
| TD | @ | 9000' |

Estimated Depths to Water, Oil or Gas Formation:

| | | |
|-------|---|-------|
| Water | @ | 200' |
| Oil | @ | 3910' |
| Gas | @ | 8150' |

Proposed Casing Program:

WITNESS
SURFACE AND
INTERMEDIATE
CASINGS.

Drilling will begin with a starter hole to 40' in which will be set 20" conductor pipe. Drill 17 1/2" to a depth of 650' run 13 3/8" casing to TD and circulate 700 sxs of cement to surface. Drill 12 1/4" hole to 1250' run 9 5/8" casing and circulate 500sxs of cement to surface. Drill 8 3/4" hole to TD (9000'). Run 5 1/2" casing to TD for completion and cement with 700 sxs.

The surface and production casing strings will be tested to 1000 psi.

Pressure Control Equipment:

Pressure control equipment will include a 5000# WP blowout preventer stack, with Series 900 blind and pipe rams. The BOP stack will include a kill line and choke manifold tested to 1000 psi. BOP hydraulic controls will be operated at least daily. A BOP schematic is attached showing the assembly for a 5000# BOP.

Circulating Medium:

Arrington anticipates the following mud program:

| | |
|---------------|---|
| 0' – 1250' | Gel/Lime slurry 8.6-9.0 mdwt vis of 28-36 |
| 1250'- 5000' | FW/Native 8.6-8.8 mdwt vis 28-32 |
| 5000' – 6300' | Cut Brine 9.2-9.4 mdwt vis 30-32 |
| 6300'- 8500' | Cut Brine/XCD/Starch/Starpac 9.2-9.5 mdwt vis 32-36 |
| 8500'- 9000' | Cut Brine/XCD/Starpac 9.4-10.0 mdwt vis 44-48 |

Auxiliary Equipment:

A full-opening safety valve, to fit the drill string in use, will be kept on the rig floor at all times.

Testing, Logging and Coring Program:

Samples: Samples will be caught at 30' intervals from surface to 3000' and at 10' intervals from 3000' to TD.

DST and Cores: At discretion of well site geologist in Abo, Wolfcamp, and Cisco.

Logging: Anticipate Neutron–Density, Gamma-Ray, and Dual Laterlog

Abnormal Pressures, Temperatures or Hydrogen Sulfide:

It is possible that H₂S will be encountered in the San Andres, however, the casing and cement program should alleviate potential danger. Bottom-hole pressure is not expected to exceed 6000#.

Anticipated Starting Date:

Drilling will commence upon approval. Drilling and completion operations will last approximately 40 days.

Surface Use Plan

for

David H. Arrington Oil & Gas, Inc.'s

GOLDSTONEFLY FEDERAL COM "12" #1

665' fsl & 1032' fwl (lot # M)
Section 12, T18S-R24E, N.M.P.M.
Eddy County, New Mexico

Lease Serial # USANMNM 101076

For the Bureau's use in evaluating the above-captioned well, this plan is submitted with the Form 3160-3 APD. The purposes of this report are to:

1. describe the location of the proposed well,
2. highlight the construction and operation activities, and,
3. to provide a complete appraisal of the environmental effects and the magnitude of the necessary surface disturbances.

Location:

The subject is located approx. 6 miles west of Atoka. The attached plats show the Goldstonefly Fed. Com "12" #1 as it has been staked in Section 12. The "Existing Lease Road" is shown on the attached Survey Plats and Topo Map. **With submission of this Application, we are requesting usage approval for the Existing Lease Road (shown in GREEN) and NEW Lease Road (shown in RED) as shown in the attached Plats and Maps.** The New Lease Road proposed in Section 11 & 12 extends 1370". All access roads will be completed for use as described below.

Existing Roads:

Driving Directions:

- From the junction of state road 285 and CR 39 one (1) mile south of Atoka go west on CR 39 approximately 9.3 miles
- then north .85 on lease road to Devon's Southern Cross "11" Fed. #1
- the location is approximately 1370' east of this wellsite

Planned Access Road:

- A. Length and Width: All lease roads will be graded in compliance with BLM standards and made a uniform width of 20', including shoulders. As shown in the attached Plats, there is New Lease road proposed in Section 11 & 12 that extends 1370'.
- B. Surfacing Material: The new access road will be constructed of material-in-place.

- C. Maximum Grade: Less than 1%
- D. Turnouts: No traffic turnouts are necessary.
- E. Drainage Design: The road will be constructed, or resurfaced with a 4" crown at the centerline.
- F. Culverts: None necessary.
- G. Cuts and Fills: The well pad will require essentially no cut and fill. Earthen berms will be constructed in accordance with BLM requirements.
- H. Gates/Cattle guards: Because of the well's location, no new cattle guards are needed.
- I. Right-of-Way: There are no right-of-way applications necessary.

Location of Existing Wells:

A recently drilled Morrow gas well is located in the SE/SE of Section 11, approximately 1370' west of the proposed location. This well is part of the Antelope Sink, North field.

Location of Existing And/Or Proposed Facilities:

If the well is productive, production, storage and measurement facilities will be constructed on a well pad in a manner consistent with the design of that shown in the attached "Tank Battery Schematic."

Location and Type of Water Supply:

Water for drilling operations will be purchased from a commercial water hauler.

Source of Construction Materials:

Whenever possible, Arrington plans to use material-in-place for construction. If necessary, caliche for surfacing the road and pad will be obtained from a privately owned pit and hauled to the location. Without prior approval, there are no plans to use caliche from Public Lands.

Methods of Handling Waste Disposal:

Drill cuttings will be disposed of in the drilling pits.

Drilling fluids will be allowed to evaporate in the drilling pits until dry.

Produced Water from any tests will be disposed of in the drilling pits.

Produced Oil from any tests will be stored in test tanks until sold.

Human waste will be handled, treated and disposed of by licensed professionals.

Well Site Layout:

The 400' x 400' area in which the drill site will be located, has been surveyed and flagged. Tentative plans have the 300' x 200' drilling pad situated as shown in the attached "Drilling Rig Pad Schematic."

Plans for Restoration of the Surface:

After the conclusion of drilling and completion operations, all unnecessary equipment and material will be removed. Prior to filling, any unguarded pits containing fluids will be fenced. Afterwards, when the pits are filled, the location will be cleared of all trash and scrap materials, and the well site will be left in as aesthetically pleasing a condition as possible.

In the event the well is non-productive, the disturbed area will be rehabilitated to Agency requirements as expeditiously as possible.

Other Information:

Topography: The regional terrain is pasture land with the drill site and access road essentially level.

Soil: The soil at the well site is sandy clay loam with associated gravel.

Flora and Fauna: Flora consists of range grasses with some yucca and mesquite, while fauna includes reptiles, rodents and birds.

Ponds and Streams: There are no ponds or streams near the well site.

Residences and Other Structures: There are no occupied dwellings within the subject section.

Archaeological, Historical and Other Cultural Sites: An Archaeological evaluation by Mesa Field Services of Carlsbad, New Mexico has been completed and presented to the BLM as a separate report.

Land Use: The area surrounding the well site is semi-arid rangeland used for grazing.

Surface Ownership: The surface is owned by Yates Petroleum located at 105 4th St., Artesia, New Mexico, 88210. A surface agreement has been reached through their agent Chuck Moran who can be contacted at 505-748-1471.

Operator's Representative:

Representative responsible for assuring compliance with the approved Surface Use Plan:

Danny H. Ledford
David H. Arrington Oil & Gas, Inc.
Post Office Box 2071
Midland, Texas 79702
915.682.6685

Certification:

I hereby certify that I, or person under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; that the work associated with the operations proposed herein will be performed by David H. Arrington Oil & Gas, Inc. and its sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

03.11.02
Date

D. H. Ledford
Danny H. Ledford, Geologist

Hydrogen Sulfide Drilling Operations Plan

for

David H. Arrington Oil & Gas, Inc.'s

GOLDSTONEFLY FEDERAL COM "12" #1

665' fsl & 1032' fwl (lot # M)
Section 12, T18S-R24E, N.M.P.M.
Eddy County, New Mexico

Lease Serial # USANMMN 101076

ONE - Hydrogen Sulfide Training:

All personnel, whether regularly assigned, contracted or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- The hazards and characteristics of hydrogen sulfide (H₂S);
- The proper use and maintenance of personal protective equipment and life support systems;
- The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds; and,
- The proper techniques of first aid and rescue procedures.

In addition, the supervisory personnel will be trained in the following areas;

- The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements;
- Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- The contents and requirements of the H₂S Drilling Operations Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500') and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

TWO - H₂S Safety Equipment and Systems:

NOTE: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or, three days prior to penetration of the first zone containing, or reasonably expected to contain, H₂S.

1. Well Control Equipment:

- Flare line with flare igniter;
- Choke manifold with one remote hydraulic choke installed;
- Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit;
- Auxiliary equipment to include an Annular Preventer.

2. Protective equipment for essential personnel:

- The designated safety expert will provide 5-minute escape units located in the doghouse, and 30-minute air units at briefing areas.

3. H2S detection and monitoring equipment:

- Three portable H2S monitors will be positioned on location for the best coverage and response. These units have warning lights and audible sirens when triggered by H2S levels > 20 PPM.
- One portable SO2 monitor will be positioned near flare line during H2S flaring operations.

4. Visual warning systems:

- Wind direction indicators will be placed in accordance with the directives issued by the designated H2S expert.
- Caution/Danger signs shall be posted on roads providing direct access to the location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be legible from the immediate location.

5. Mud Program:

- The mud program will minimize the volume of H2S circulated to the surface. Proper mud weight safe drilling practices, and, if necessary, the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

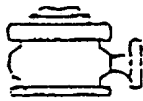
- All drill strings, casing, tubing, wellhead, blowout preventers, drilling spools kill lines, choke manifold and line valves shall be suitable for H2S service.
- All elastomers used for packing and seals shall be H2S trimmed.

7. Communications:

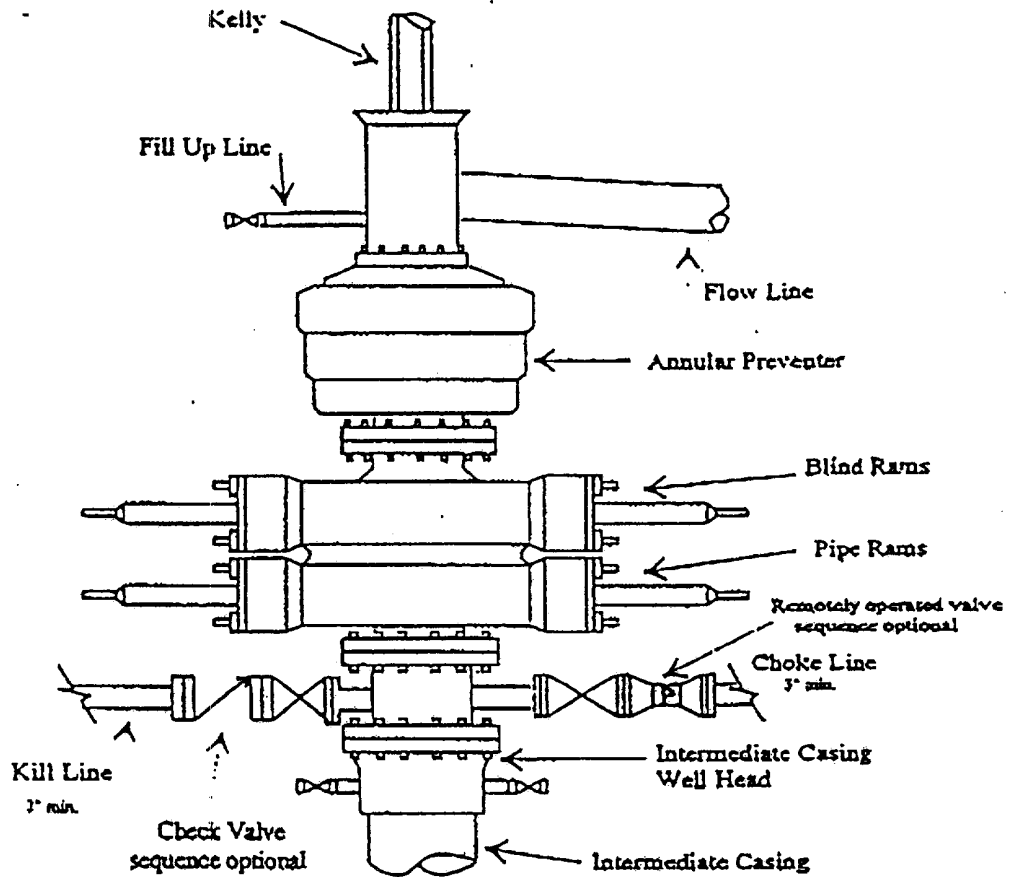
- Radio and telephone communications will be available in company vehicles and rig doghouse.

8. Well Testing:

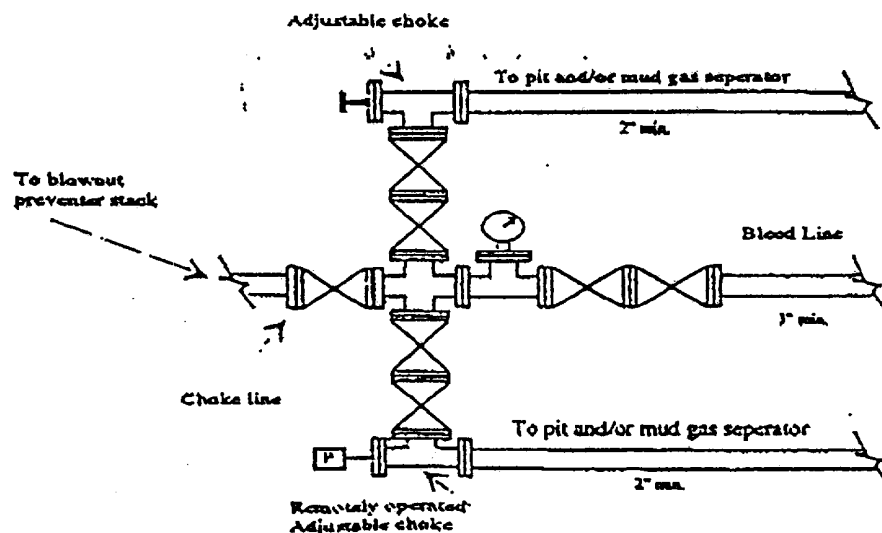
- Drill stem testing will be performed with a minimum number of personnel necessary to safely and adequately conduct the test. The drill stem testing of any known formation that contains H2S will be conducted during daylight hours.

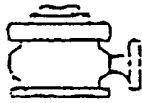


David H. Arrington Oil & Gas, Inc.
 Typical 5,000 psi Pressure System
 Schematic
 Annular with Double Ram Preventer Stack



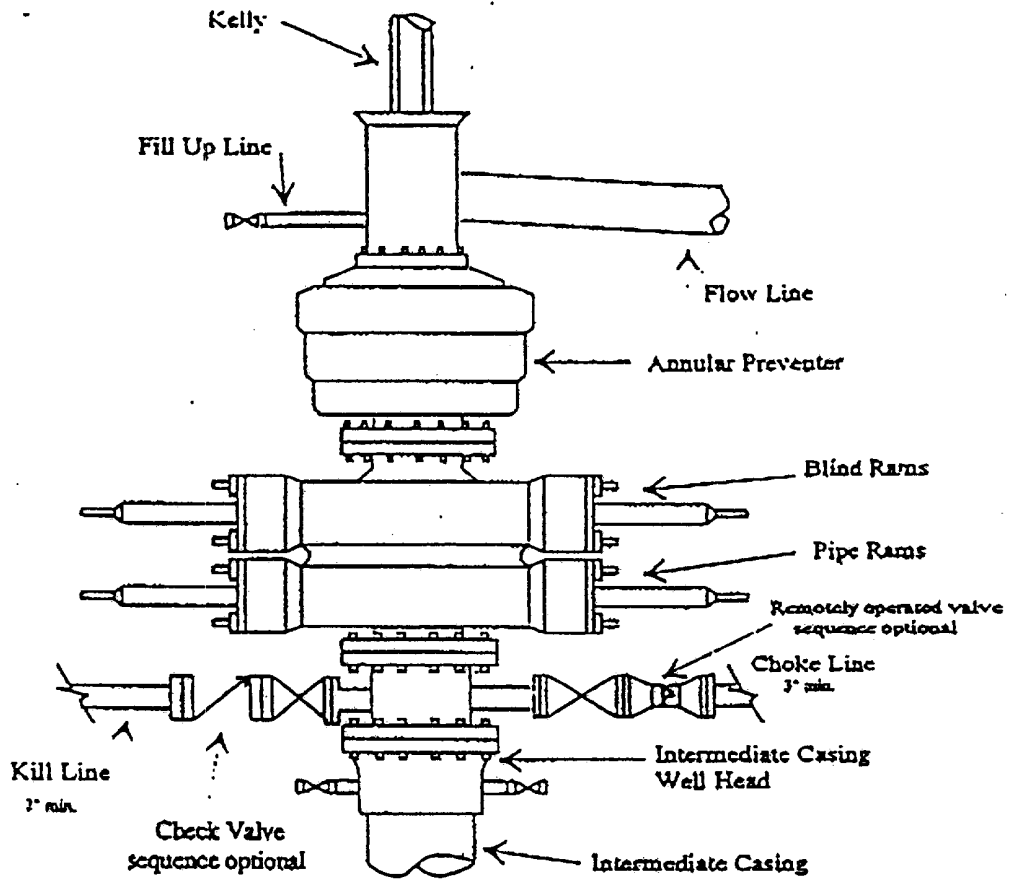
Typical 5,000 psi choke manifold assembly with at least these minimum features



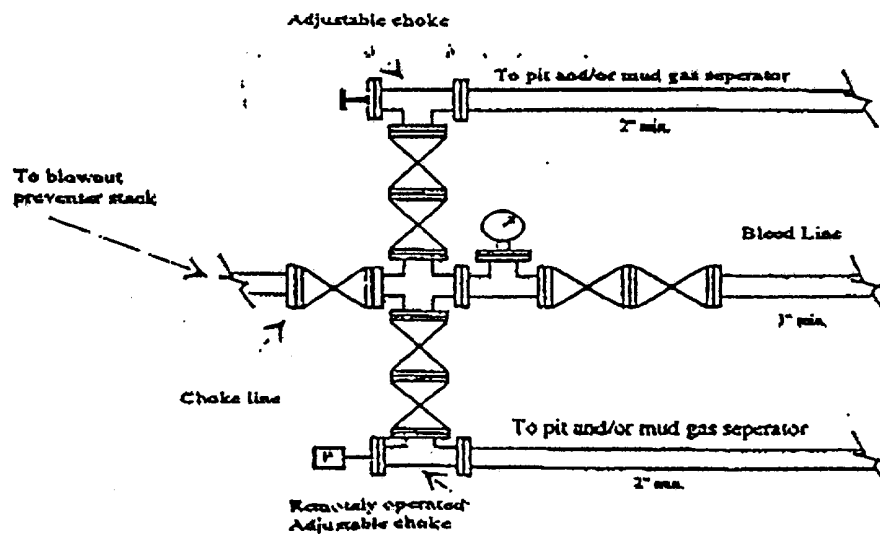


David H. Arrington Oil & Gas, Inc.

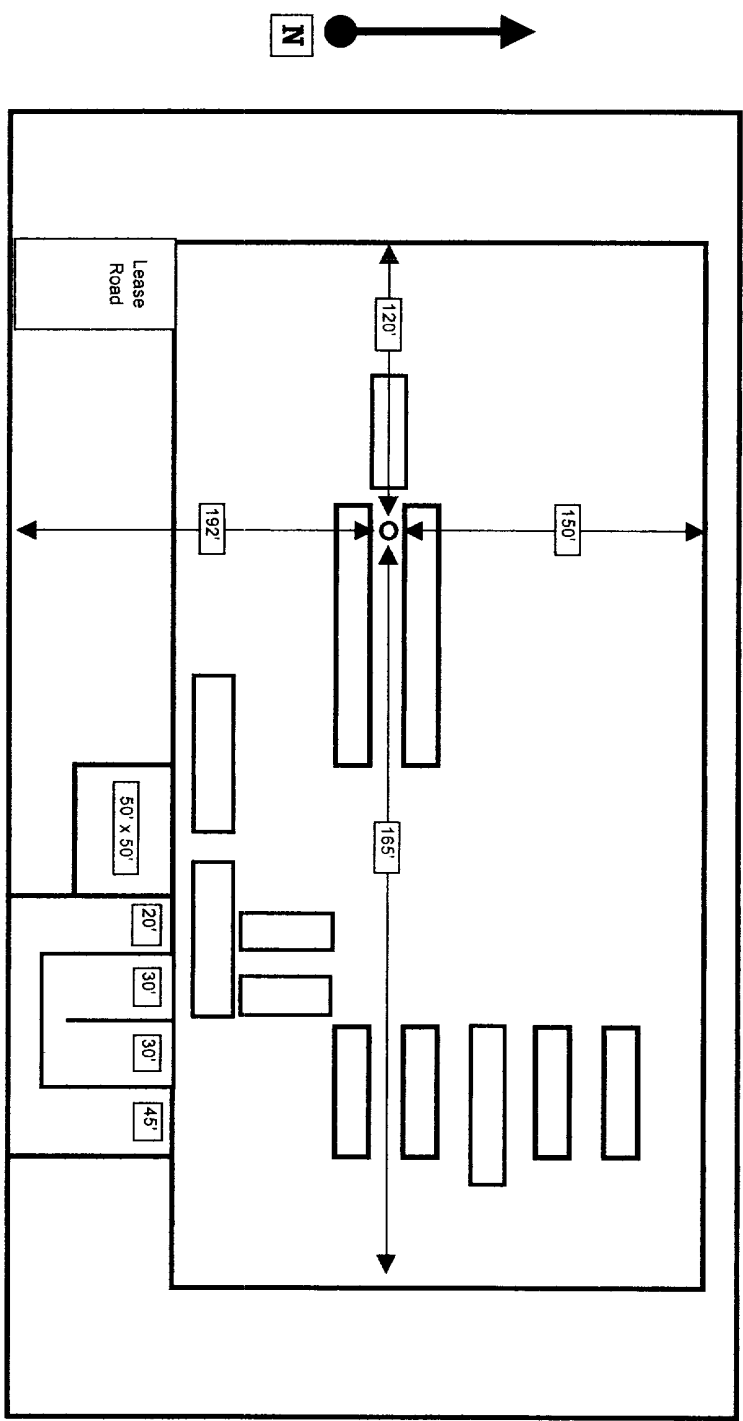
Typical 5,000 psi Pressure System Schematic Annular with Double Ram Preventer Stack



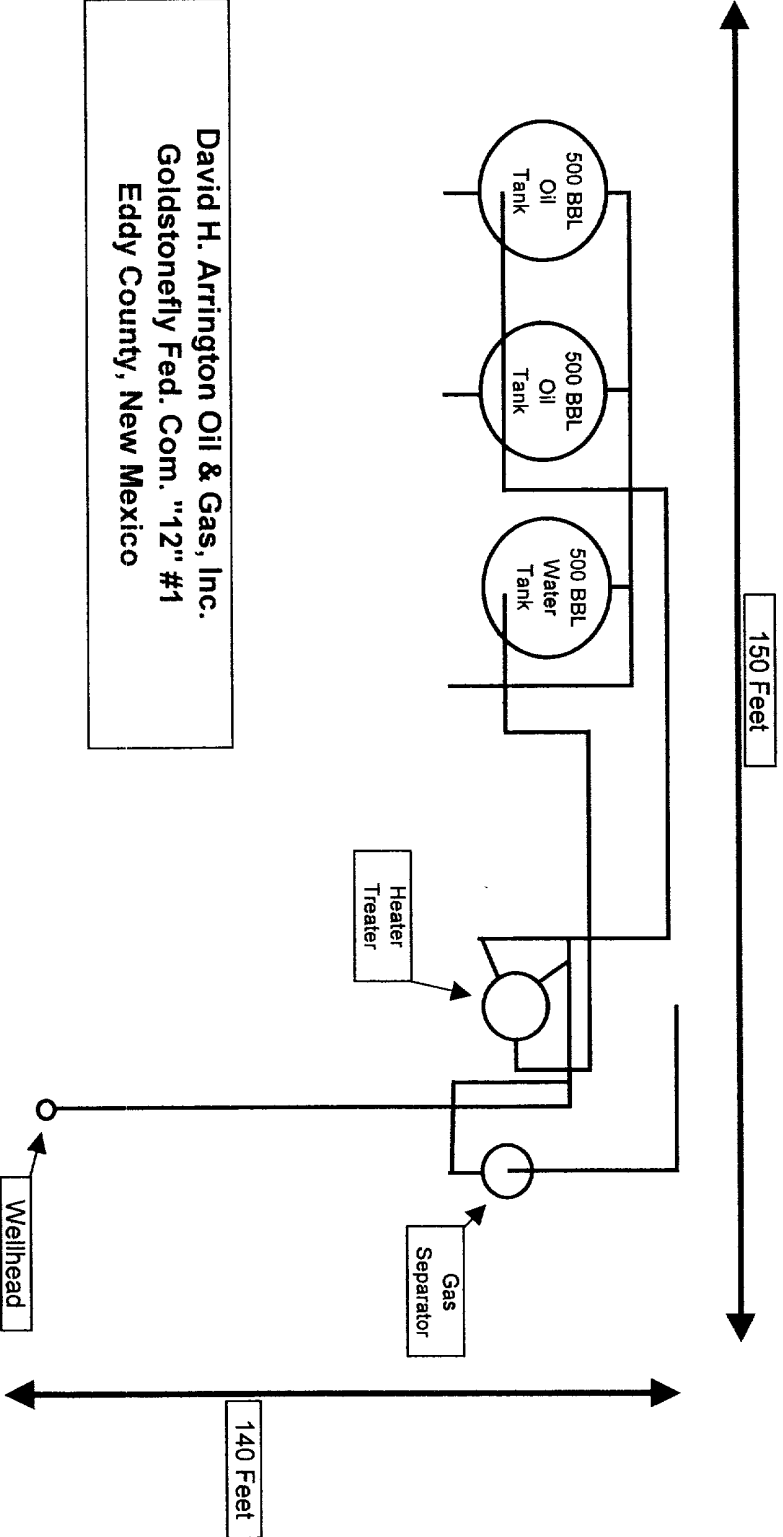
Typical 5,000 psi choke manifold assembly with at least these minimum features



David H. Arrington Oil & Gas, Inc.
Drilling Rig Pad Schematic
Goldstonefly Fed. Com. "12" #1
Eddy County, New Mexico



TYPICAL TANK BATTERY SCHEMATIC



David H. Arrington Oil & Gas, Inc.
Goldstonefly Fed. Com. "12" #1
Eddy County, New Mexico

DISTRICT I ~~18~~ 106511
P. O. Box 1980
Hobbs, NM 88241-1980

State of New Mexico
Minerals, and Natural Resources Department

Form C-102
Revised 02-10-94

Instructions on back

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, NM 87507-2088

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

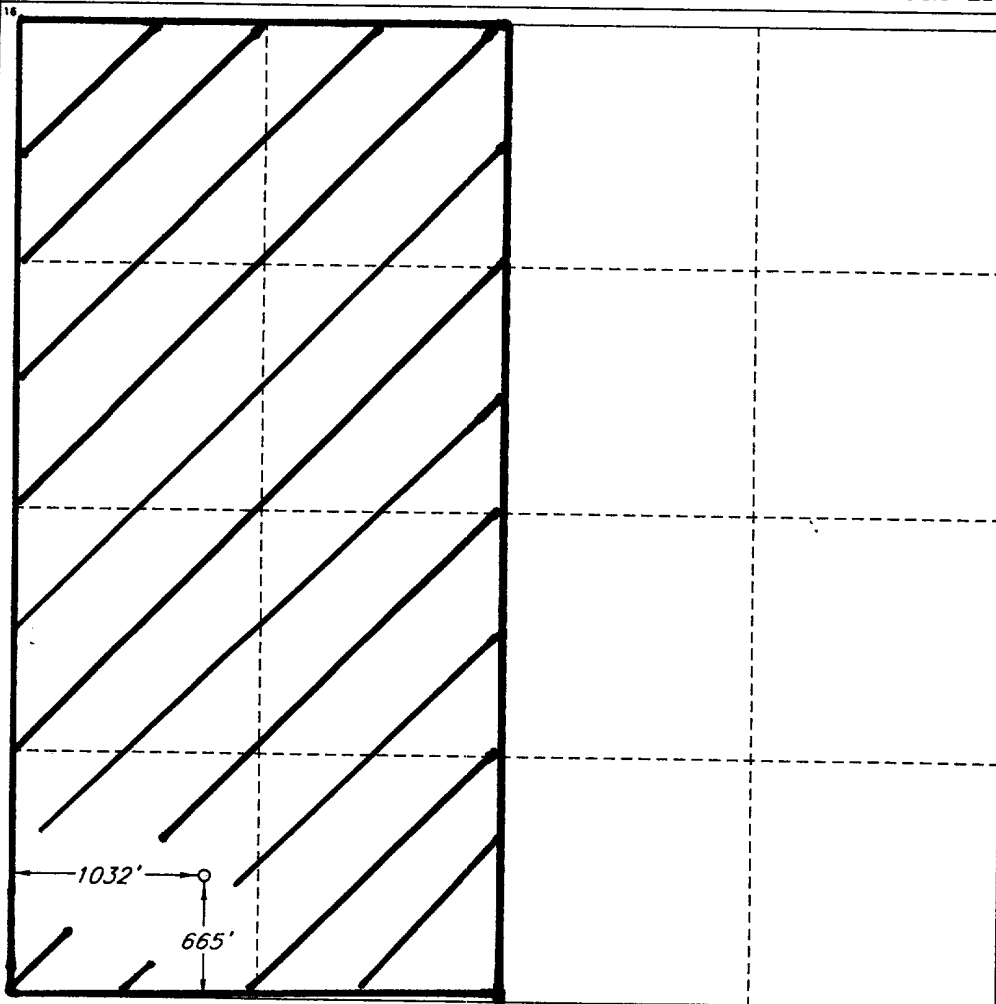
Submit to the Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | | | | | | | |
|---|---------------|---|----------------------------|-----------------------|-----------------------|---------------------------|---------------|------------------------|----------------|
| 1 API Number | | 2 Pool Code | | 3 Pool Name | | | | | |
| 4 Property Code | | 5 Property Name GOLDSTONE FLY FEDERAL COM '12' | | | | | | 6 Well Number 1 | |
| 7 OGRID No. | | 8 Operator Name DAVID H. ARRINGTON OIL & GAS, INC. | | | | | | 9 Elevation 3673' | |
| 10 SURFACE LOCATION | | | | | | | | | |
| UL or lot no. M | Section 12 | Township 18 SOUTH | Range 24 EAST, N.M.P.M. | Lot Ida | Feet from the 665' | North/South line SOUTH | 990' 1032' | East/West line WEST | County EDDY |
| 11 BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE | | | | | | | | | |
| UL or lot no. | Section | Township | Range | Lot Ida | Feet from the | North/South line | Feet from the | East/West line | County |
| 12 Dedicated Acres 320 | | 13 Joint or Infill | | 14 Consolidation Code | | 15 Order No. | | | |

NO ALLOWABLE WELL 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 that the information
contained herein is true and complete
to the best of my knowledge and belief.

Signature
D. H. Leoford
Printed Name
DANNY H. LEOFORD
Title
GEOLOGIST
Date
03.11.02

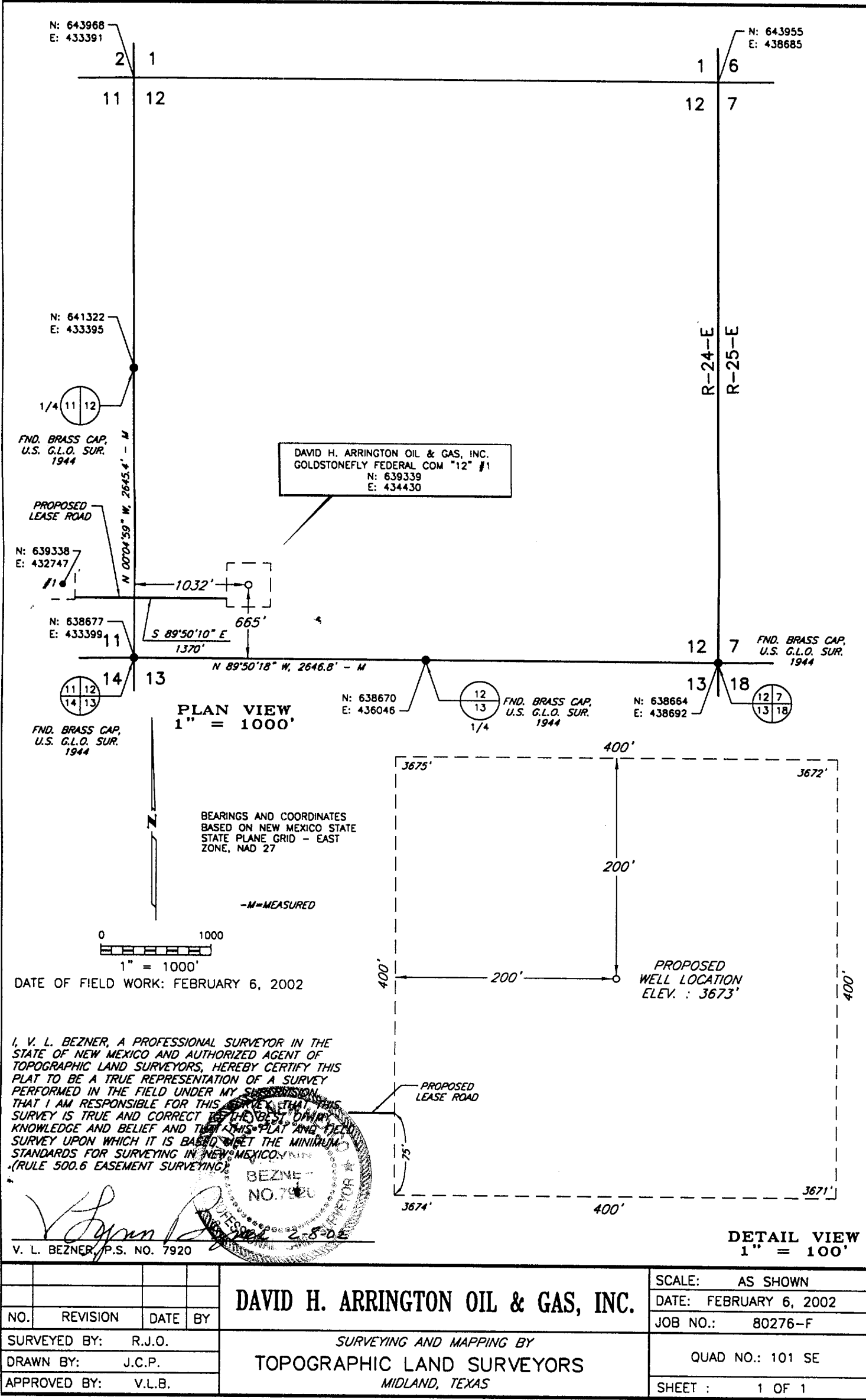
SURVEYOR CERTIFICATION

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.

Date of Survey
FEBRUARY 6, 2002

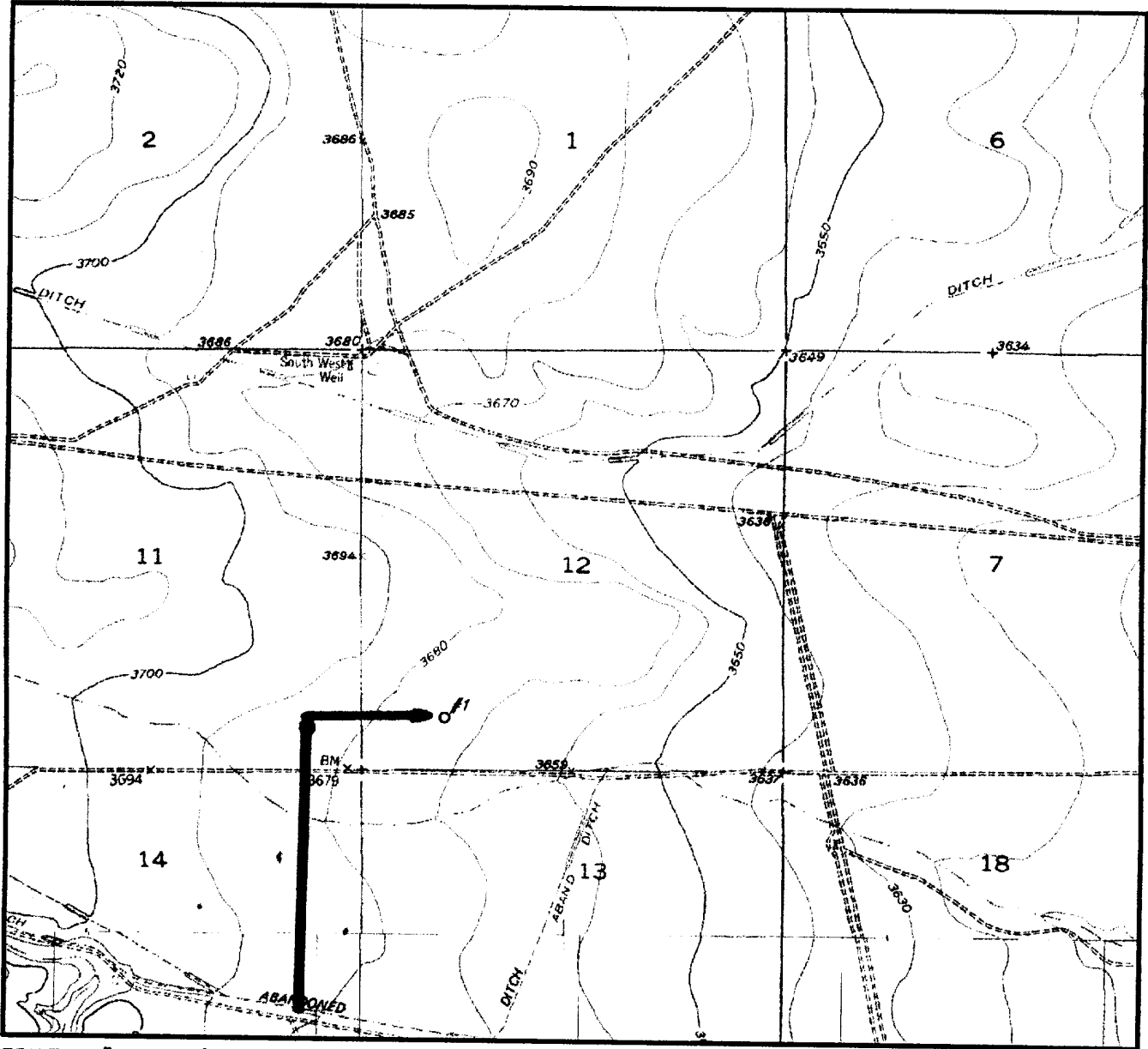
Signature and Seal of
Professional Surveyor
V. L. BEZNER
Certificate No.
V. L. BEZNER R.P.S. #7920
JOB #80276 / 101 SE / J.C.P.

PLAT SHOWING PROPOSED WELL LOCATION IN
SECTION 12, T-18-S, R-24-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



RECEIVED
MAR 13 PM 6 20
U.S. FIELD OFFICE

LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10, FEET

SECTION 12 TWP 18-S RGE 24-E
SURVEY NEW MEXICO PRINCIPAL MERIDIAN
COUNTY EDDY STATE NM
DESCRIPTION 665' FSL & 1032' FWL
ELEVATION 3673'

OPERATOR DAVID H. ARRINGTON OIL & GAS, INC.
LEASE GOLDSTONEFLY FEDERAL COM "12" #1

U.S.G.S. TOPOGRAPHIC MAP
HOPE SE, NEW MEXICO

LAT. N 32°45'27"
LONG. W 104°32'48"



This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.
Review this plat and notify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

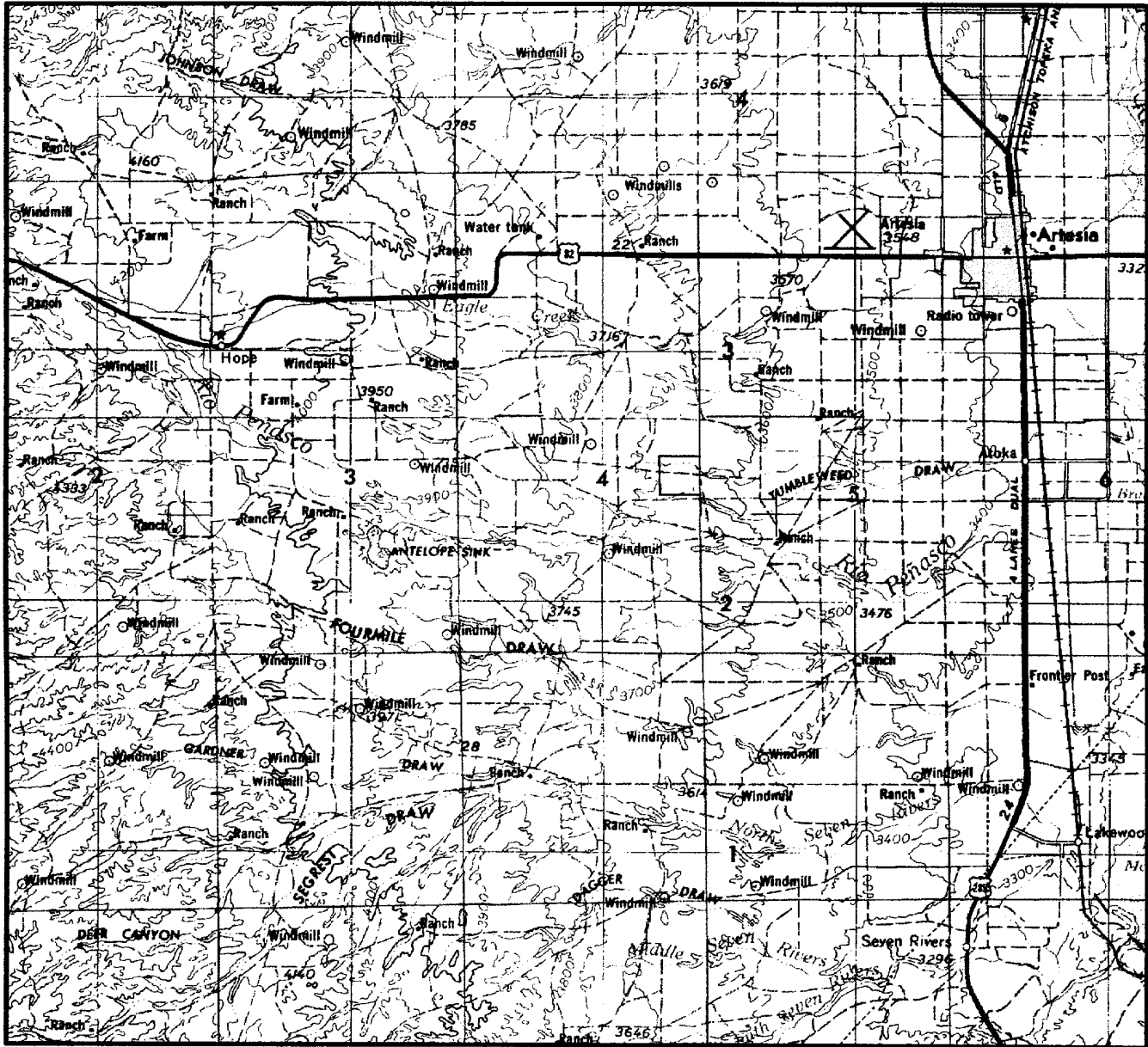
1307 N. HOBART
PAMPA, TX. 79065
(800) 658-6382

6709 N. CLASSEN BLVD.
OKLAHOMA CITY, OK. 73116
(800) 654-3219

2903 N. BIG SPRING
MIDLAND, TX. 79705
(800) 767-1653

RECEIVED
MAR 13 PM 3 23
OFFICE OF THE
SHERIFF FIELD OFFICE

VICINITY MAP



SECTION 12 TWP 18-S RGE 24-E
SURVEY NEW MEXICO PRINCIPAL MERIDIAN
COUNTY EDDY STATE NM
DESCRIPTION 665' FSL & 1032' FWL

OPERATOR DAVID H. ARRINGTON OIL & GAS CO.
LEASE GOLDSTONEFLY FEDERAL COM "12" #1

DISTANCE & DIRECTION FROM JCT. OF U.S. 285 &
COUNTY ROAD 39, ±6.0 MILES SOUTH OF ARTESIA, GO
WEST 6.0 MILES ON COUNTY ROAD 39, CONTINUE WEST
3.5 MILE ON DIRT COUNTY ROAD (LEASE ROAD), THENCE
NORTH 0.7 MILE ON LEASE ROAD TO EXISTING DEVON
WELL, A POINT ±1700' WEST OF LOCATION.

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.
Review this plat and notify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

1307 N. HOBART
PAMPA, TX. 79065
(800) 658-6382

6709 N. CLASSEN BLVD.
OKLAHOMA CITY, OK. 73116
(800) 654-3219

2903 N. BIG SPRING
MIDLAND, TX. 79705
(800) 767-1653

RECEIVED

APR 13 PM 3 38

U.S. DEPT. OF JUSTICE

COMMUNICATIONS SECTION