RE-SUBMITTAL

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(July 1992)

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

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

# APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NMNM-048344

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐

7. UNIT AGREEMENT NAME:

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER — SINGLE ZONE ☐ MULTIPLE ZONE ☐

8. FARM OR LEASE NAME, WELL NO.: Williams A Federal #2

2. NAME OF OPERATOR: SDX Resources, Inc. 020451

9. API WELL NO.: 30-015-32459

3. ADDRESS AND TELEPHONE NO.: PO Box 5061, Midland, TX 79704 432/685-1761

RECEIVED
SEP 16 2004
OCD-ARTESIA

10. FIELD AND POOL, OR WILDCAT: Artesia, GL-YE

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1800' FSL 1650' FWL, Unit K
At proposed prod. zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 29, T17S, R28E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 10 miles East of Artesia, NM

12. COUNTY OR PARISH: Eddy

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drlg. unit line, if any): 330'

16. NO. OF ACRES IN LEASE: 200

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 1124'

19. PROPOSED DEPTH: 3500'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3683' GR

22. APPROX. DATE WORK WILL START*: 11/01/04

23. PROPOSED CASING AND CEMENTING PROGRAM

ROSWELL CONTROLLED WATER BASIN

| SIZE OF HOLE | GRADE, SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|---|---|---|---|---|
| 12-1/4" | 8-5/8" J-55 | 24# | 450' | 325 sx |
| 7-7/8" | 4-1/2 - 5-1/2" J-55 | 9.5# - 17# | 3500' | 700 sx |
| | | | | |

WITNESS

RESUBMITTAL: Battery location has been amended to Williams A Fed #1. Access road amended to follow original flowline ROW (new exhibit 3A & B). BOP requirements amended (new exhibit 1) as formerly approved by Sundry Notice.

Plan to drill a 12-1/4" hole to 450'. Set 24# 8-5/8" csg & cmt to surf. Drill 7-7/8" hole to 3500'. Run LDT-CNL-GR & DLL-GR OH logs. Run 5-1/2" J-55 14# csg & cmt to surf.

Will perf & stimulate as necessary for optimum production.

Surface Use & Operations Plan
Drilling Program
H2S Plan

EXHIBITS:
1: BOP Diagram
2: Survey Plat (Original on File)
3: Access Maps
4: One Mile Radius Map
5: Rig Orientation Diagram
6: Letter of Responsibility

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

IN ABOVE SPACE DESCRIBE PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Bonnie Atwater TITLE Regulatory Tech DATE 08/13/04

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY /s/ Joe G. Lara TITLE FIELD MANAGER DATE 15 SEP 2004

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

APPROVAL FOR 1 YEAR

DRILLING PROGRAM
SDX Resources Inc.
**Williams A Federal # 2**
1800' FSL, 1650' FWL
Unit K, Sec. 29, T17S, R28E
Eddy Co., NM

1. Geologic Name of Surface Formation:

   Permian

2. Estimated Tops of Important Geologic Markers:

| | |
|---|---|
| Yates | 600 |
| 7- Rivers | 900' |
| Queen | 1200' |
| Grayburg | 1600' |
| San Andres | 1950' |

3. Estimated Depth of Anticipated Fresh Water, Oil or Gas:

| | | |
|---|---|---|
| Water Sand | 150' – 200' | Fresh Water |
| Yates | 650 | Oil & Gas |
| 7-Rivers | 950 | Oil & Gas |
| Queen | 1400' | Oil & Gas |
| Grayburg | 1880' | Oil & Gas |
| San Andres | 2800' | Oil & Gas |

Fresh water sands will be protected by running 8-5/8" casing to a minimum depth of 450' and circulating cement. All other zones will be isolated by running 4-1/2" or 5-1/2" production casing and circulating cement.

4. Casing Program:

| Hole Size | Interval | OC Csg | Weight Grade Jt Cond Type |
|---|---|---|---|
| 12-1/4" | 0 – 450 | 8-5/8" | 24#, J55, New |
| 7-7/8" | 0 – TD | 4-1/2" – 5-1/2" | 9.5# - 17#, J55, Used |

Cement Program:

| | |
|---|---|
| 8-5/8" Surface Casing: | Cemented to surface with 325 sx of Class C with 2% CaCl and ¼#/sx Flocele. |
| 5-1/2" Production Casing: | Cemented with 300 sx of Class C and 400 sx of Lite C with 6# salt/sx and ¼#/sx Flocele. This should circulate cement to the surface. |

5. Minimum Specifications for Pressure Control:

   The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of an annular bag type preventer (1000 psi WP). Unit will be hydraulically operated. BOP will be nippled up on the 8-5/8" surface csg and used continuously until TD is reached. BOP and accessory equipment will be tested to 1000 psi before drilling out of surface casing. A 2" kill line and a 2" choke line will be included in the drilling spool. Other accessories to the BOP equipment will include a kelly cock.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of fresh water and brine water mud system. The applicable depth and properties of this system are as follows:

| Depth | Type | Weight (ppg) | Viscosity (sec) | Waterloss (cc) |
|---|---|---|---|---|
| 0 – 450 | Fresh Water (spud) | 8.5 | 40 – 45 | N/C |
| 450 – TD | Brine water, SWG, Starch | 10.0 | 30 | 24 |

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary Well Control and Monitoring Equipment:

A. A kelly cock will be kept in the drill string at all times.

B. A mud logging unit complete with H2S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 450' to TD.

8. Logging, Testing and Coring Program:

A. Drillstem tests will be run on the basis of drilling shows.

B. The electric logging program will consist of GR-Dual Laterolog and GR-Compensated Neutron-Density from TD to surface casing.

C. Conventional coring may be performed in select intervals if deemed necessary.

D. Further testing procedures will be determined after the production casing has been cemented at TD based on drill shows and log evaluation.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressure or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 94° and estimated maximum bottom-hole pressure (BHP) is 600-800 psig. No abnormal concentrations of hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. All H2S operation precautions will be followed (see attached H2S drilling operations plans). No major loss circulation zones have been reported in offsetting wells.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is October 1, 2004. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN
SDX Resources Inc.
**Williams A Federal # 2**
1800' FSL, 1650' FWL
Sec. 29, T17S, R28E, Unit K
Eddy Co., NM

I. 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:

1. The hazards and characteristics of hydrogen sulfide (H2S).

2. The proper use and maintenance of personal protective equipment and life support system.

3. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.

4. The proper techniques for first aid and rescue procedures.

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

1. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.

2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

3. The contents and requirements of the H2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial safety session just prior to commencing operations on the well. The initial session shall include a review of the site's specific H2S Drilling Operations Plan and the Public Protection 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.

II. H2S SAFETY EQUIPEMNT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500'.

1. Well Control Equipment:

   A. Annular Preventer to accommodate all pipe sizes with properly sized closing unit.

2. Protective Equipment for Essential Personnel:

   A. Mark II Surviveair 30-minute units located in the dog house.

3. H2S Detection and Monitoring Equipment:

   A. 1 – portable H2S monitor positioned on location for best coverage and response.

   B. Mud logging trailer shall have H2S monitoring equipment.

4. Visual Warning Systems:

   A. Guy lines will be flagged and a wind sock will be positioned on location.

   B. Caution/Danger signs shall be posted on roads providing direct access to location.

5. Mud Program:

   The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices, will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

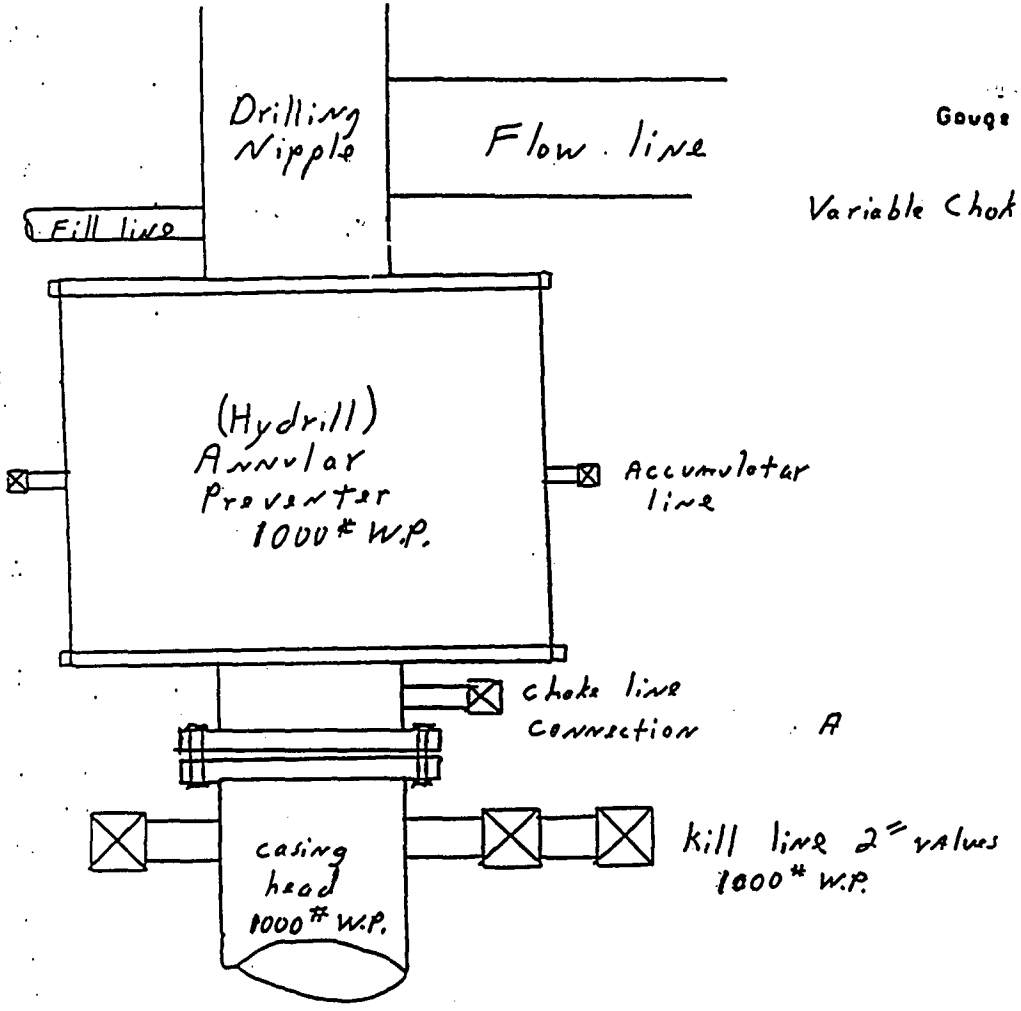
   All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service as necessary.

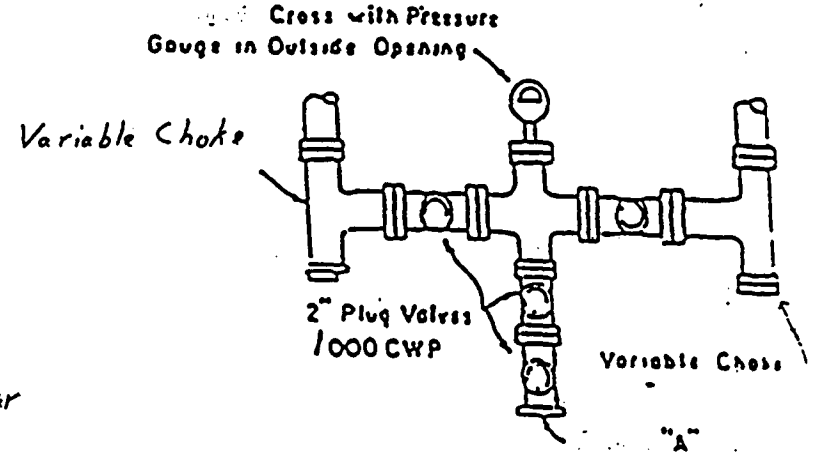
7. Communication:

   Radio communications in company vehicles including cellular telephone and 2-way radio.

8. Well Testing:

   No DST's are planned.




PLAN VIEW - CHOKE MANIFOLD

Exhibit #1

RECEIVED
APR 17 2000
BY:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised March 17, 1999

Submit to 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 |
|---|---|---|
| | 96830 | Artesia, GL-YE |

| [4] Property Code | [5] Property Name | [6] Well Number |
|---|---|---|
| 26370 | WILLIAMS A FEDERAL | 2 |

| [7] OGRID No. | [8] Operator Name | [9] Elevation |
|---|---|---|
| 020451 | SDX RESOURCES, INC. | 3683. |

## [10] Surface Location

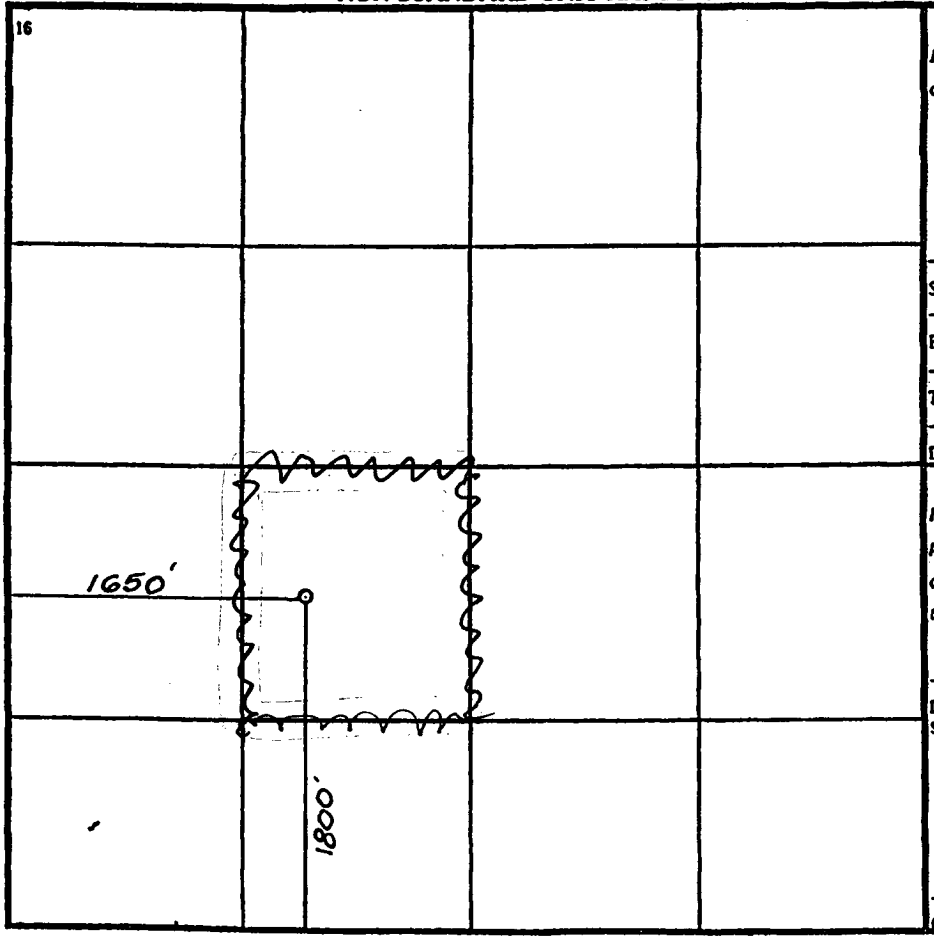
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| K | 29 | 17-S | 28-E | | 1800 | SOUTH | 1650 | WEST | EDDY |

## [11] 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 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| [12] Dedicated Acres | [13] Joint or Infill | [14] Consolidation Code | [15] Order No. |
|---|---|---|---|
| 40 | | | |

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




## [17] OPERATOR CERTIFICATION

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

Signature: Bonnie Atwater

Printed Name: Bonnie Atwater

Title: Regulatory Tech

Date: 4/28/00

## [18] 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:*

APRIL 3, 2000

Date of Survey

Signature and Seal of Professional Surveyor:

GARY L. REDDY
NEW MEXICO
5412
REGISTERED PROFESSIONAL ENGINEER
LAND SURVEYOR

Certificate Number: NM PE&PS NO. 5412

Original on file