

**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

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. LC-032511-E	
2. NAME OF OPERATOR SDX Resources, Inc.			6. IF INDIAN, ALLOTTEE OR TRIBE NAME 	
3. ADDRESS AND TELEPHONE NO. PO Box 5061, Midland, TX 79704 915/685-1761			7. UNIT AGREEMENT NAME 	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements *) At surface 1930' FNL 1880' FEL, Unit G At proposed prod. zone Same			8. FARM OR LEASE NAME, WELL NO. Langlie Jal Federal #2	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 1-1/2 miles NE of Jal, NM			9. API WELL NO. 30-025-34619	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drg. unit line, if any) 610' / 560'			10. FIELD AND POOL, OR WILDCAT Jalmat Gas	
16. NO. OF ACRES IN LEASE 80			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 8, T25S, R37E	
17. NO. OF ACRES ASSIGNED TO THIS WELL 160			12. COUNTY OR PARISH Lea	
18. DISTANCE FROM PROPOSED* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 362'			13. STATE NM	
19. PROPOSED DEPTH 3200'			20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3157' GR			22. APPROX. DATE WORK WILL START* 05/01/99	

23. PROPOSED CASING AND CEMENTING PROGRAM					
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	WITNESS
12-1/4"	8-5/8" J55	24#	450'	350 sx Class C	
7-7/8"	4-1/2-5-1/2 J55	9.5-17#	3200'	400 sx Lite, 200 sx Class C	

Plan to drill 12-1/4" hole to appx 450'. Set 8-5/8" surface csg. Circ Class C cmt. Drill 7-7/8" hole to 3200'. Set 4-1/2" or 5-1/2" csg & circ cmt. Perforate Yates gas zone & stimulate as necessary for optimum production.

Specific Programs:

- Exhibit #1: BOP Diagram
- Exhibit #2: Survey Plat
- Exhibit #3: Existing & Proposed Roads Map
- Exhibit #4: Producing Well Area Map
- Exhibit #5: Drill Site Layout

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

20451
23987
79240
5-4-99
30-025-34619

4/19/99

to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or ations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Bonnie Ottwater TITLE Regulatory Tech. DATE 03/02/99

(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

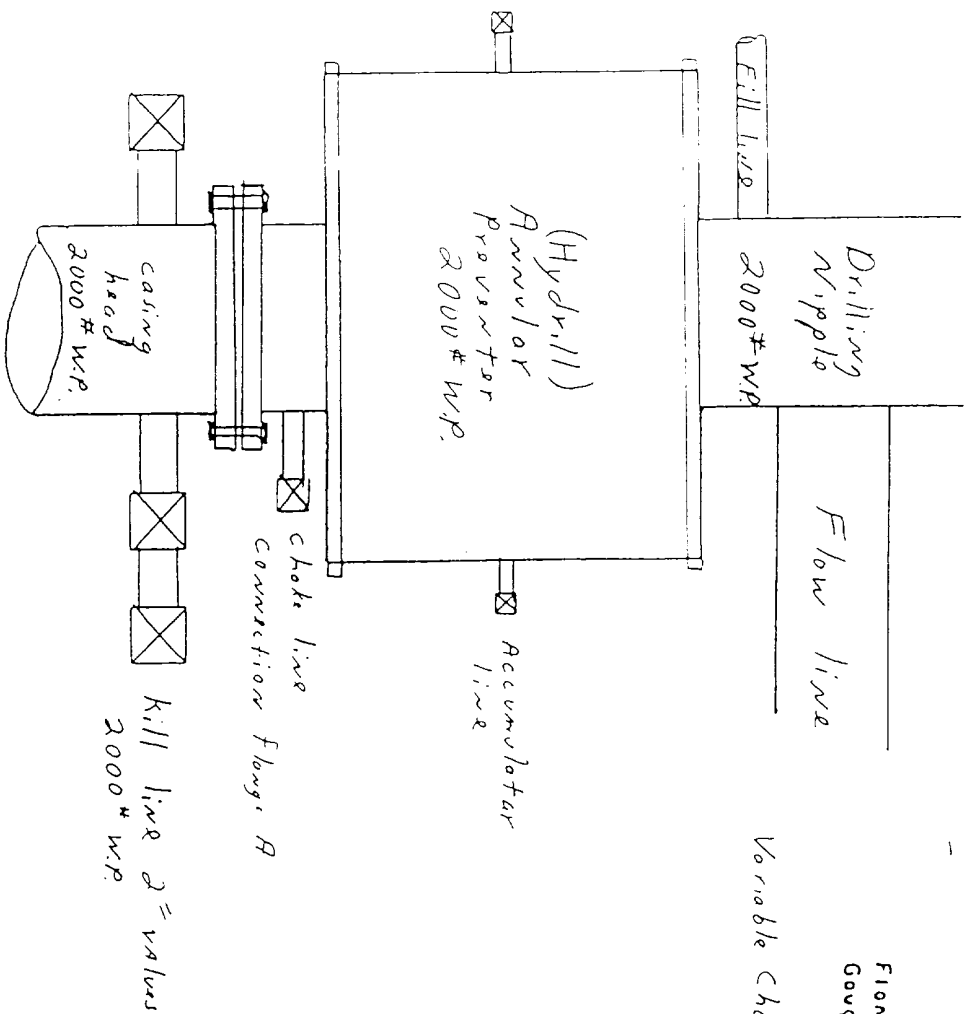
Acting
Assistant Field Office Manager,
Lands and Minerals

APPROVED BY [s] Gary A. Stephens TITLE _____ DATE 4-28-99

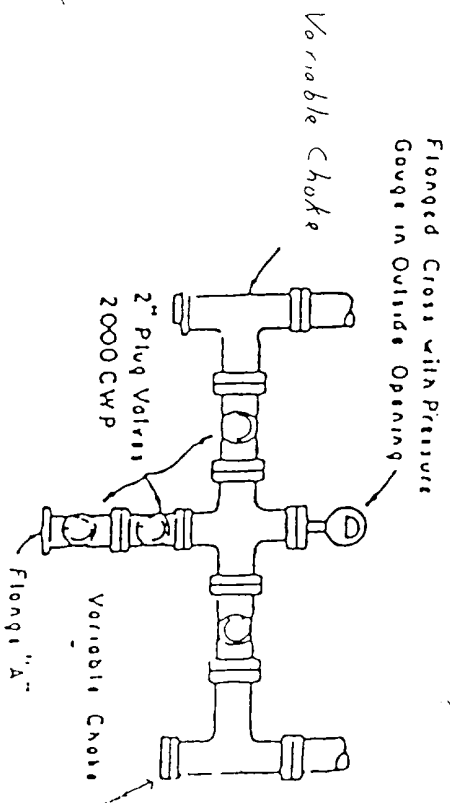
*See Instructions On Reverse Side

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.





PLAN VIEW-CHOKE MANIFOLD



District I
PO Box 1980, Hobbs, NM 88240-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Bravo Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

MAR 11 1999

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-34619		Pool Code 79240	Pool Name Jalmat Gas
Property Code 23987	Property Name LANGLIE JAL FEDERAL		Well Number 2
GRID No. 020451	Operator Name SDX RESOURCES, INC.		Elevation 3157.

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
G	8	25-S	37-E		1930	NORTH	1880	EAST	LEA

¹¹ Bottom Hole Location if Different From Surface

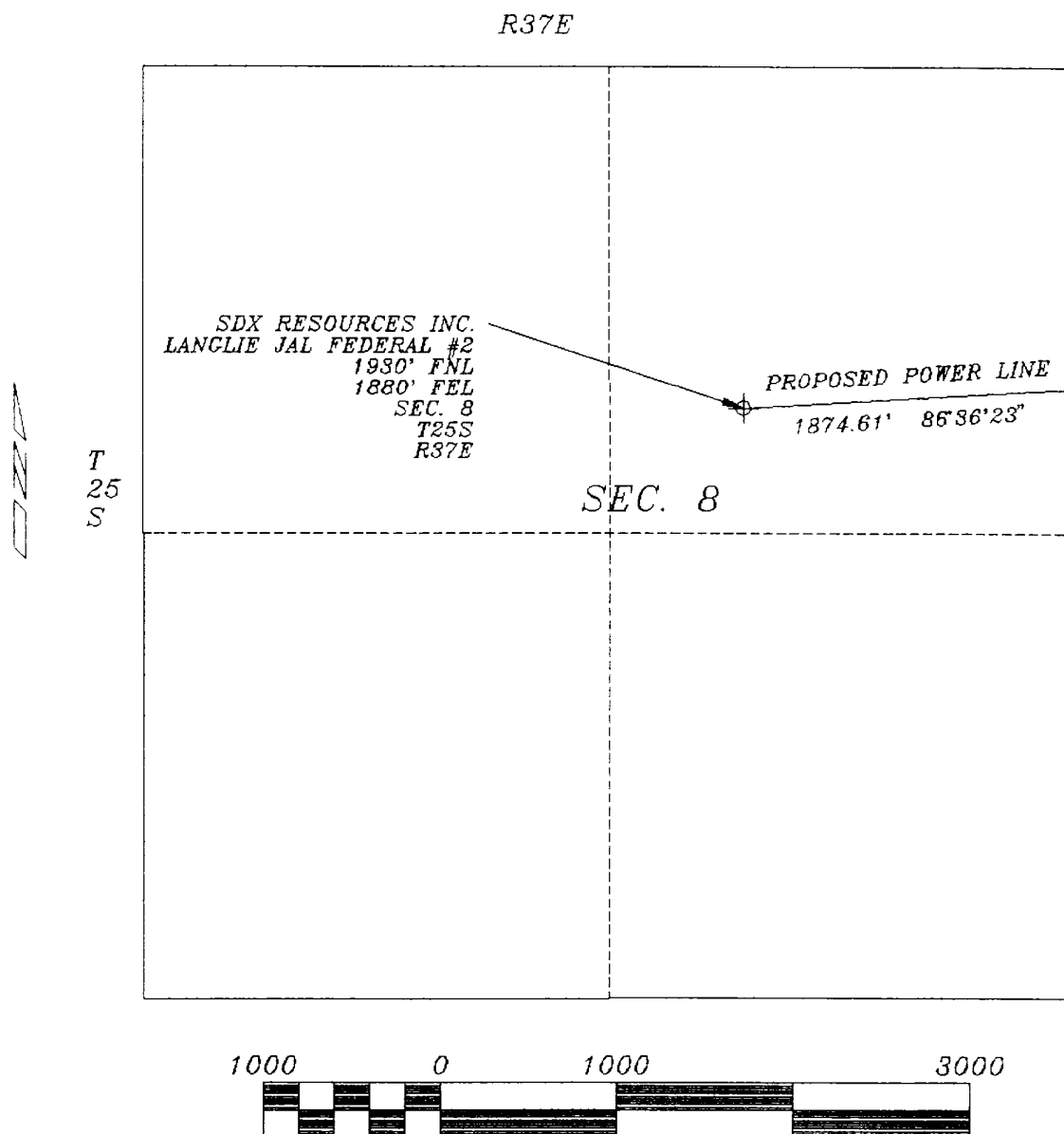
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

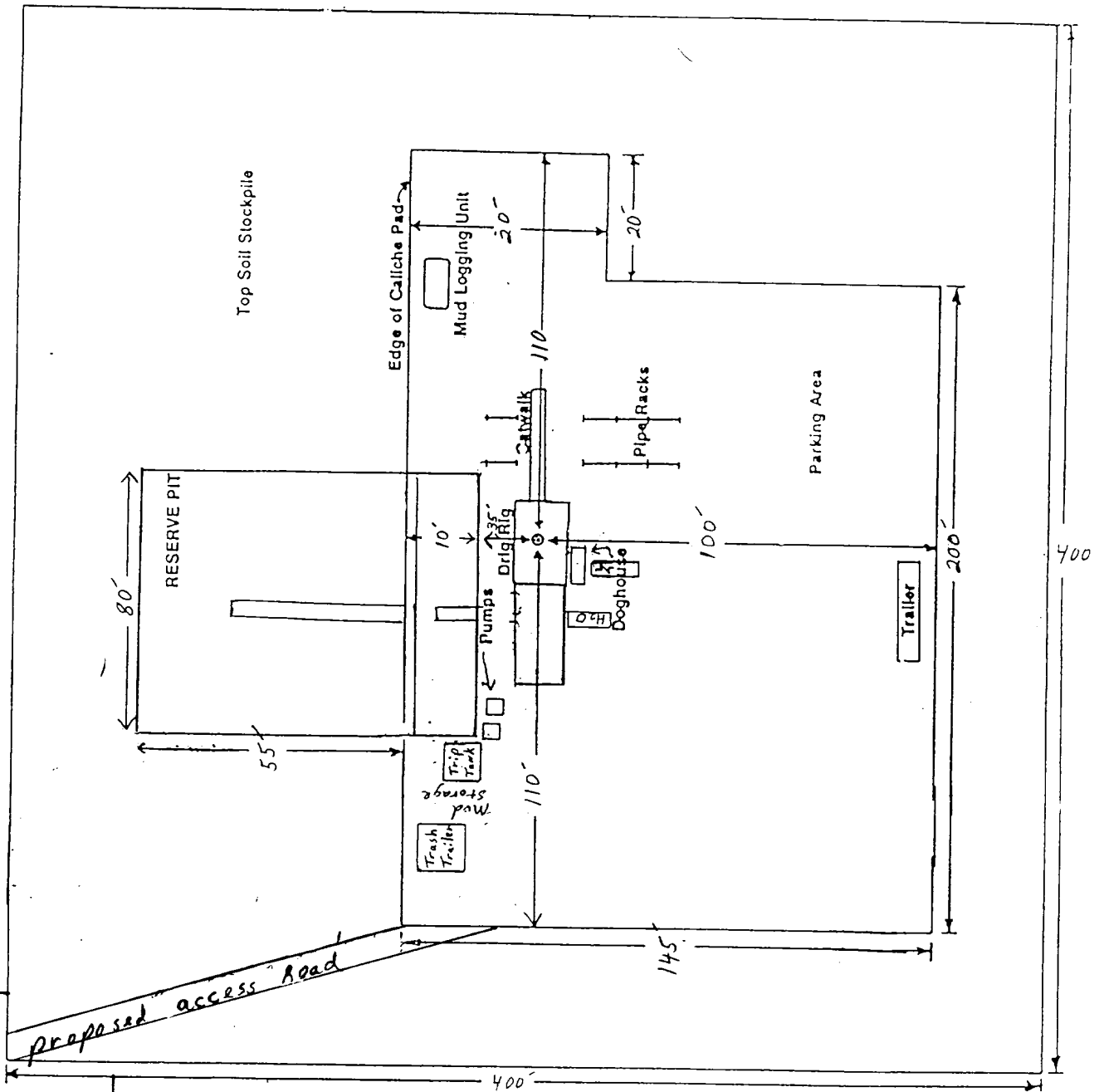
¹⁶ 	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Bonnie Atwater Printed Name Regulatory Tech. Title March 3, 1999 Date
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on 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. FEBRUARY 18, 1999 Date of Survey Signature and Seal of Professional Surveyor Certificate Number NM PE&PS NO. 5412

PROPOSED POWER LINE SKETCH



Scale 1" = 1000 ft

PREPARED BY: DAN R. REDDY NM PE&PS
PREPARE FOR: SDX RESOURCES INC.
FEB. 26, 1999



GPII
Langlie Jal
Unit #78
location

N

SDX RESOURCES, INC.

Exhibit #5
Drill Site Layout
Langlie Jal Federal #2

SURFACE USE AND OPERATIONG PLAN
SDX RESOURCES, INC.
Langlie Jal Federal #2
1930' FNL, 1880' FEL
Unit G, Sec. 8, T25S, R37E
Lea Co., NM

1. Existing Roads:

- A. The well site and elevation plat for the proposed well is shown in Exhibit #2. It was staked by Dan Reddy, Carlsbad, New Mexico.
- B. All roads to the location are shown in Exhibit #3. The existing rods are labeled and are adequate for travel during drilling production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.
- C. Directions to location: Go East of Jal on 128 .8 miles to CR 16. Turn Left or North on CR 16. Go 1.9 miles and turn Left through cattleguard. Go .1 mile to Langlie Jal Federal #1 location and go straight or West .2 miles and turn left. Go .2 miles and turn right and go .1 mile to GPII #78 location. Follow access road to location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed Access Road:

Exhibit #3 shows the existing road.

100' of access road will be necessary, but will fall within the 400² area of review. Access road is shown in Exhibit #5.

3. Location of Existing Wells:

Exhibit #4 shows all existing wells within a one-mile radius of this well.

4. Location of Existing and/or Proposed Facilities and ROW's:

- A. If the well is productive:
 - 1. A flowline of adequate size to handle the anticipated production will be laid along the existing road right-of-way to the existing production facilities on the Langlie A Federal #1 location (shown in Exhibit #3).
 - 2. Electrical power will be constructed as shown in Exhibit #3.
- B. If the well is productive, rehabilitation plans are as follows:
 - 1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after the well is complete).
 - 2. Topsoil removed from the drill site will be used to raconteur the pit area to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud systems as outlined in the drilling program. The brine and fresh water will be obtained from commercial water stations in the area and hauled to roads shown in Exhibit #3. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and any new access road will be obtained from the drilling pits and/or on site when possible. Any additional caliche will be obtained from approved caliche pits. All roads and pads will be constructed of 6" rolled and compacted caliche.

7. Methods of Handling Water Disposal:

- A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.
- B. Drilling fluids will be contained in plastic lined pits. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit, approximately 80' x 55' x 6' deep and fenced. The reserve pit will be plastic-lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water.
- C. Water produced from the well during completion may be disposed into the reserve pit. After the well is permanently placed on production, produced water will be trucked to an approved disposal site.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash trailer by a contractor. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operations.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned-up within 90 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to breakout and fill and as weather permits the unused portion of the well site will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will be kept in use.

8. Ancillary Facilities:

None

9. Well Site Layout:

- A. The drill pad layout is shown in Exhibit #5. Dimensions of the pad and pits and location of major rig components are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection. Because the pad is almost level no major cuts will be required.

- B. Exhibit #5 shows the planned orientation for the rig and associated drilling equipment, reserve pit, trash pit, pipe racks, turn-around, parking areas and access road. No permanent living facilities are planned but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.
- C. The reserve pit will be lined with high-quality plastic sheeting (5-7 mil thickness).

10. Plan for Restoration of the Surface:

- A. Upon completion of the proposed operation, if the well is to be abandoned, the pit area, after allowing to dry, will be broken out and leveled. The original top soil will be returned to the entire location which will be leveled and contoured to as nearly the original topography as possible.

All trash and garbage will be hauled away in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.

- B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.
- C. The reserve pit will be fenced prior to and during drilling operations. The fencing will remain in place until the pit area is cleaned-up and leveled. No oil will be left on the surface of the fluid in the pit.
- D. Upon completion of the proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from any area of the original drill site not needed for production operations or facilities will be removed and used for construction of thicker pads. Any additional caliche required for facilities will be obtained from an approved caliche pit. Topsoil removed from the drill site will be used to recontour the pit area and any unused portions of the drill pad to the original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

C. D. Woolworth Trust
PO Box 178
Jal, NM 88252

A R-O-W agreement has been negotiated.

12. Other Information:

- A. The area around the well site is grassland. The vegetation is native scrub grasses with abundant catclaw and mesquite.
- B. There is no permanent or live water in the immediate area.
- C. An Archaeological Survey has been requested and will be forwarded to your office in the near future.

13. Lessee's and Operator's Representative:

The SDX Resources Inc. representative for assuring compliance with the surface use plan is as follows:

Chuck Morgan
SDX Resources Inc.
PO Box 5061
Midland, TX 79704
915/685-1761 Office
915/685-0533 Fax

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by SDX Resources Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved.

SDX Resources Inc.



John Pool
Vice-President

DRILLING PROGRAM
SDX Resources Inc.
Langlie Jal Federal #2
1930' FNL, 1880' FEL
Unit G, Sec. 8, T25S, R37E
Lea Co., NM

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Top of Salt	1200'
Base of Salt	2200'
Yates	2900'
7 Rivers	3550'
Queen	3900'
Grayburg	4300'

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

Water Sand	200' - 250'	Fresh Water
7 Rivers	3700'	Oil & Gas
Queen	4000'	Oil & Gas
Grayburg	4400'	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:

<u>Hole Size</u>	<u>Interval</u>	<u>OC Csg</u>	<u>Weight Grade Jt Cond Type</u>
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 250 sx of Class C with 2% CaCl and 1/4#/sx Flocele and 100 sx of Class C with CaCl.

5-1/2" Production Casing: Cemented with 200 sx of Class C and 400 sx of Lite C with 3# salt/sx and 1/4#/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 a bag-type (hydrill) preventer (2000 psi WP). Unit will be hydraulically operated. BOP will be nipped 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:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (sec)</u>	<u>Waterloss (cc)</u>
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 1000' 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 in the Yates formation.
- 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 1200 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 May 1, 1999. 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.
Langlie Jal Federal #2
1930' FNL, 1880' FEL
Sec. 8, T25S, R37E, Unit G
Lea 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.