Form 3160-3
(July 1992)

N. M. Oil Cons. Div.

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NM-105204

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐

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

7. UNIT AGREEMENT NAME: 27511

8. FARM OR LEASE NAME, WELL NO.: Malibu Federal #1

2. NAME OF OPERATOR: SDX Resources, Inc. 20451

9. API WELL NO.: 30-015-31631

3. ADDRESS AND TELEPHONE NO.: PO Box 5061, Midland, TX 79704 915/685-1761

10. FIELD AND POOL, OR WILDCAT: Red Lake, QN-GB-SA

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1750 FSL 1650 FEL, Unit J
At proposed prod. zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 5, T18S, R27E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 15 miles SE 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)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
330 / 330	80	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
866	3500	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3461' GR

22. APPROX. DATE WORK WILL START*: 12/01/00

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8", J-55	24#	1150'	575 sx
7-7/8"	5-1/2", J-55	14 - 15.5#	3500'	600 sx

Plan to drill a 12-1/4" hole to appx 1150'. Set 8-5/8" surface csg. Circ Cl C cmt. Drill 7-7/8" hole to 3500'. Run OH logs (LDT-CNL-GR & DLL-GR). Set 5-1/2" csg & circ cmt. Perf the San Andres & stim as necessary for optimum production.

Specific programs as per Onshore Oil & Gas Order #1 are outlined in the following attachments:

Drilling Program:
Surface Use & Operating Plan
Exhibit #1 - Location & Elevation Plat
Exhibit #2 - BOP Equipment
Exhibit #3 - Planned Roads & Access
Exhibit #4 - One Mile Radius Map
Exhibit #5 - Drilling Rig Layout

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

RECEIVED
OCD - ARTESIA

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 11/02/00

(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 _____ TITLE _____ DATE _____

*See Instructions On Reverse Side

APPROVED FOR 1 YEAR

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.

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
	51300	Red Lake QN-GB-SA

[4] Property Code	[5] Property Name	[6] Well Number
	MALIBU FEDERAL	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
020451	SDX RESOURCES, INC.	3461.

[10] Surface Location

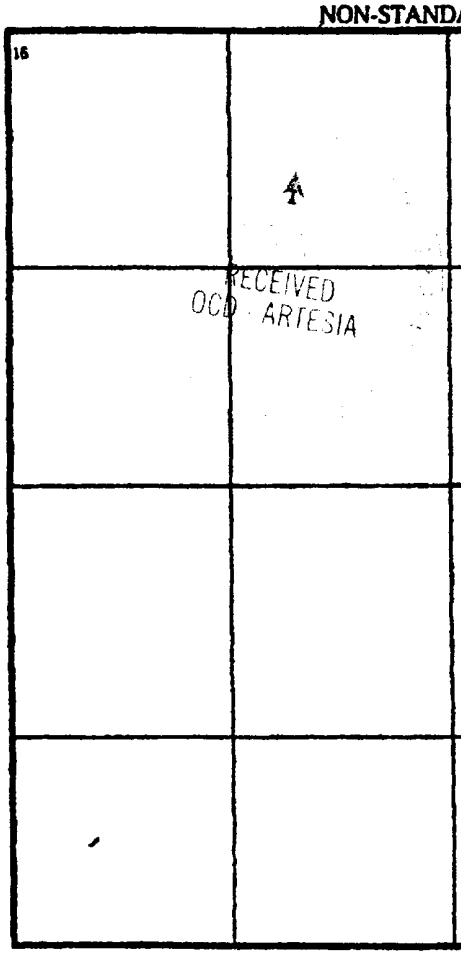
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	5	18-S	27-E		1750	SOUTH	1650	EAST	EDDY

[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: 11/27/00

[18] SURVEYOR CERTIFICATION

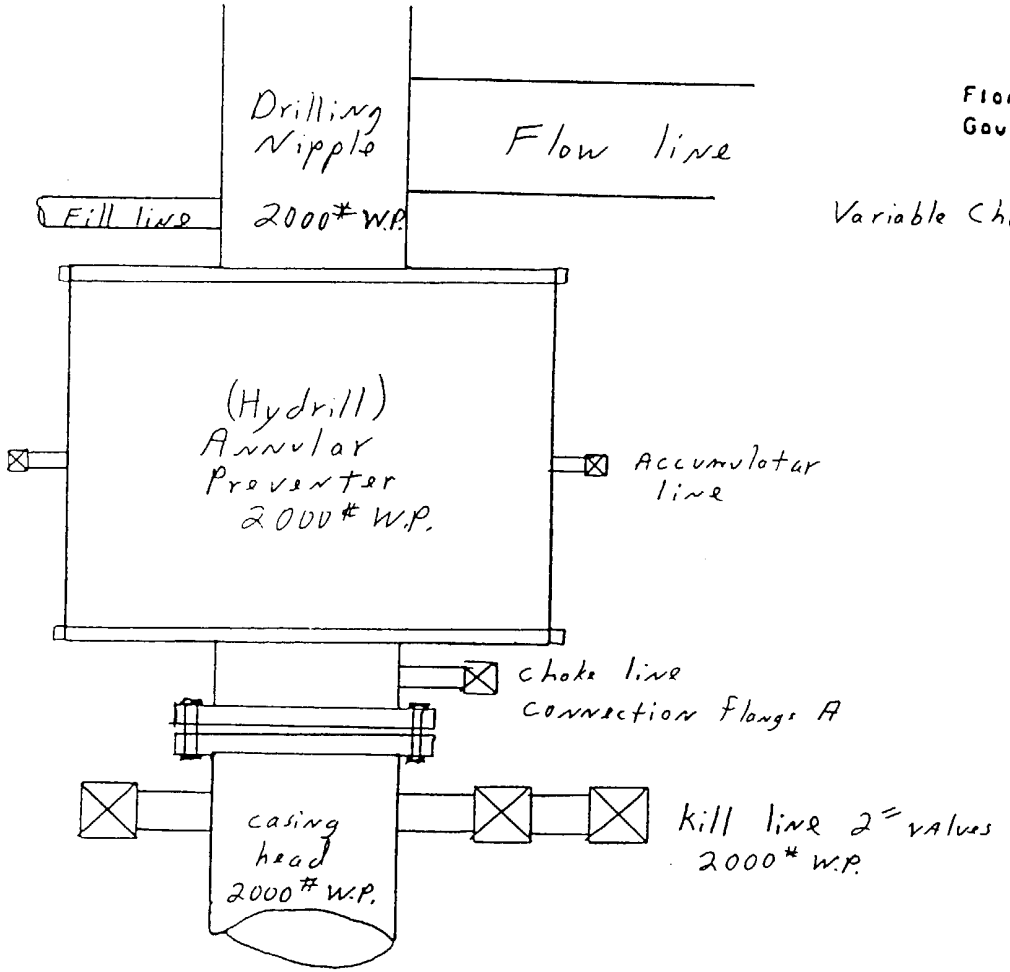
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

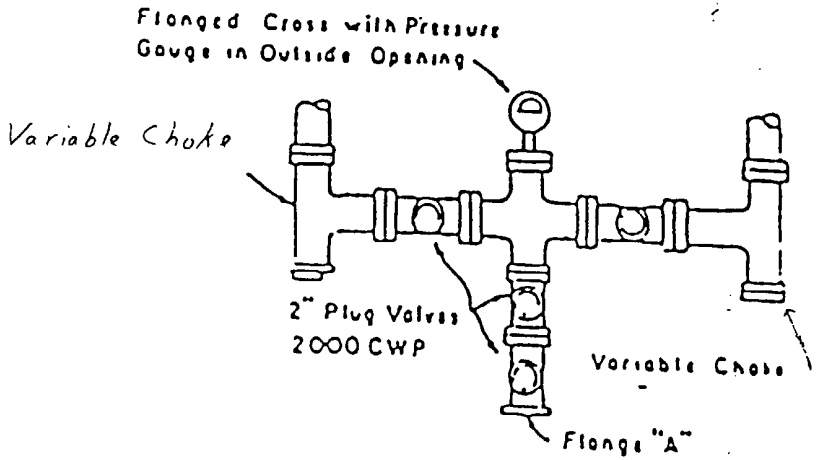
Date of Survey: SEPTEMBER 12, 2000

Signature and Seal of Professional Surveyor: GARY L. JONES, NEW MEXICO, 5412, REGISTERED PROFESSIONAL ENGINEER, LAND SURVEYOR

Certificate No. NM PE&PS NO. 5412

Exhibit #1

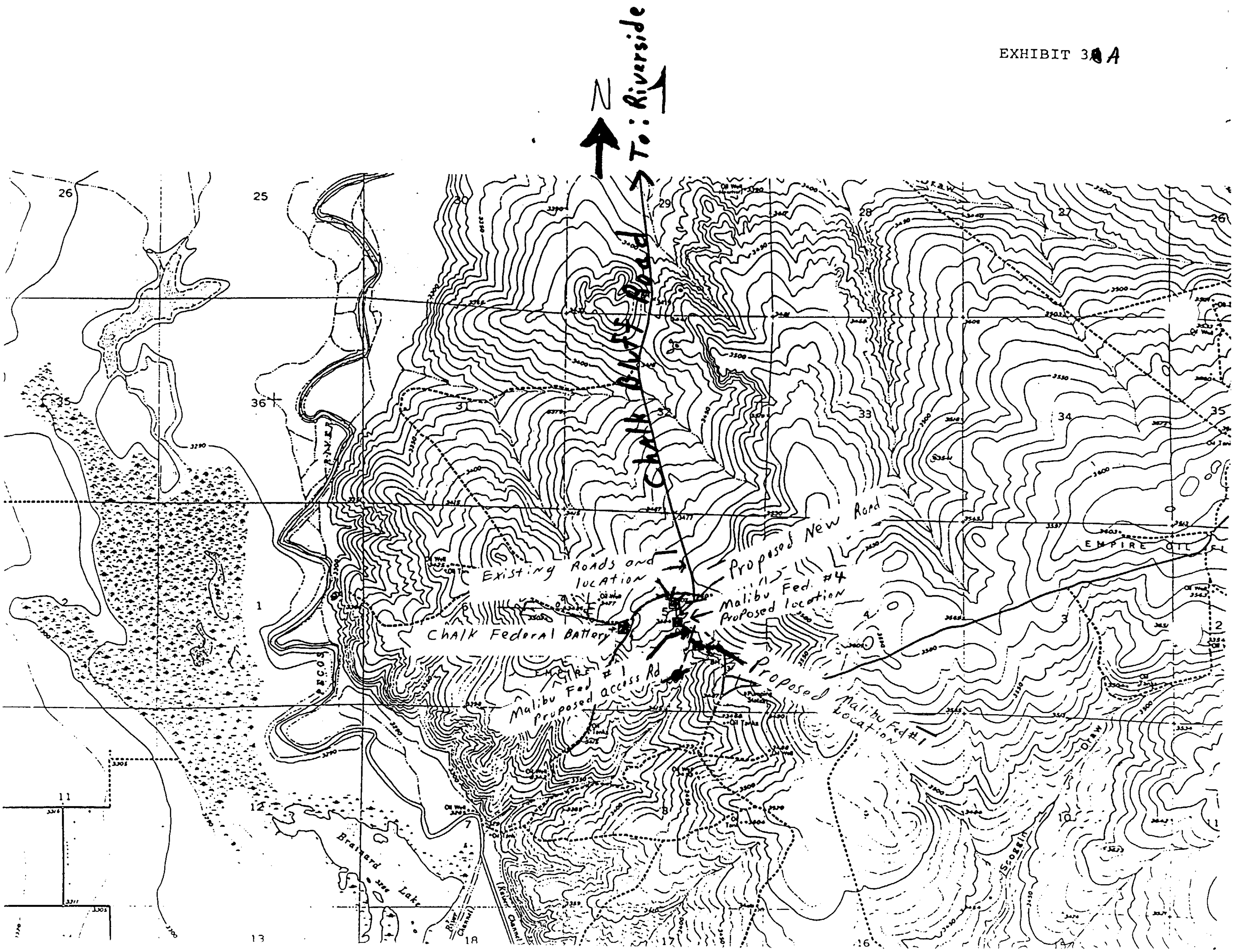




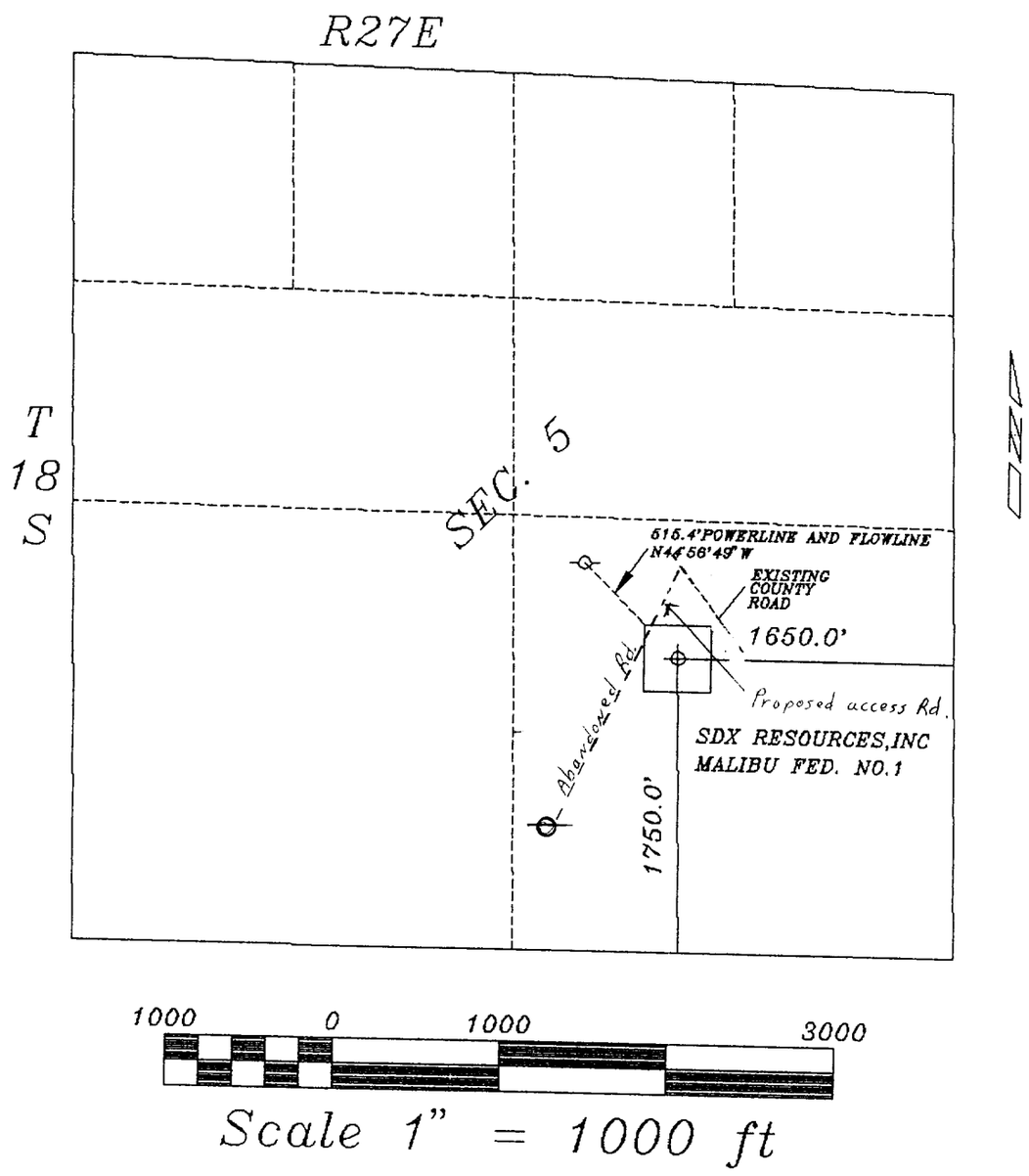
PLAN VIEW - CHOKE MANIFOLD

Exhibit #2

EXHIBIT 3A

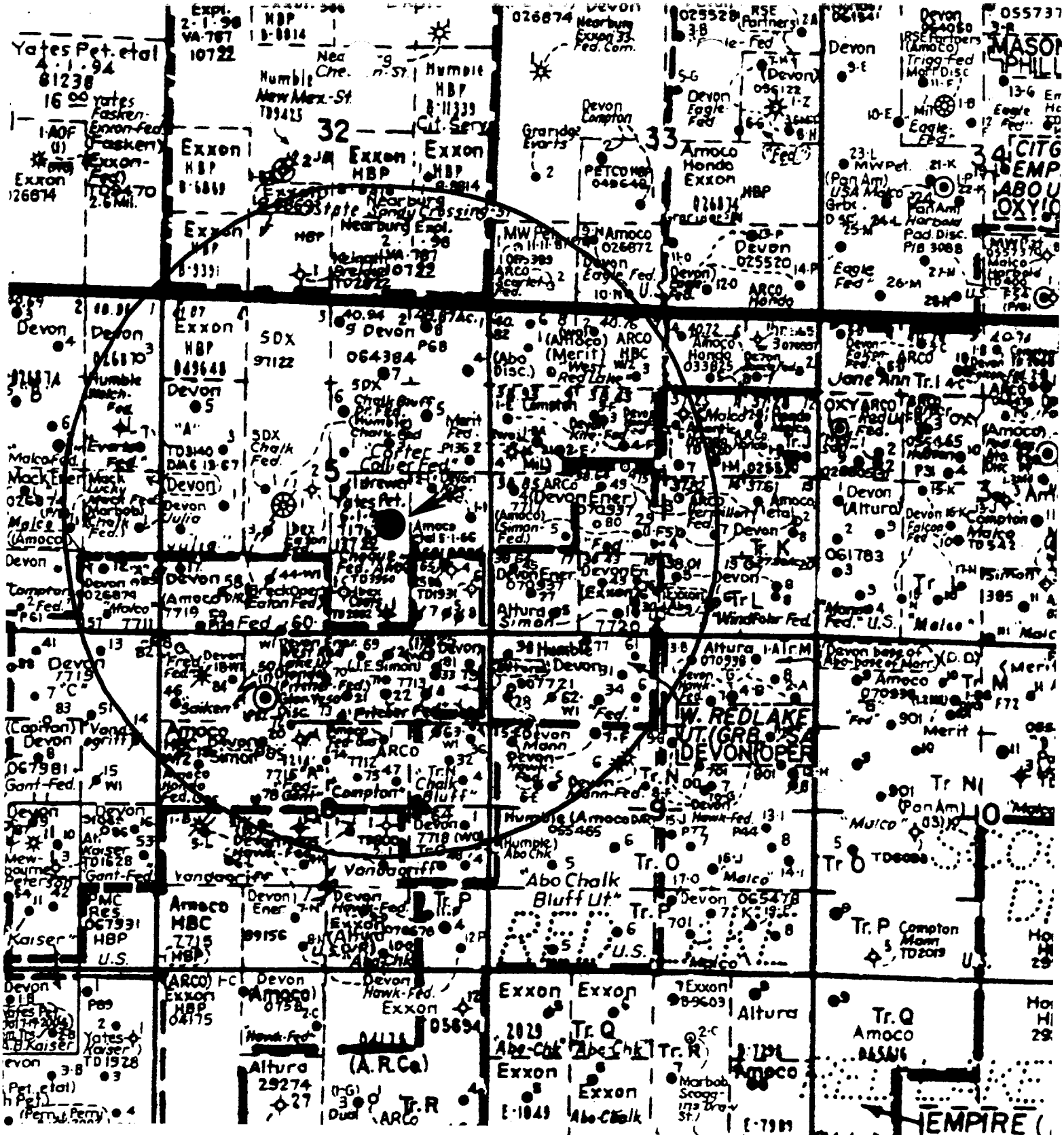

N
To: Riverside
Chalk Bluff Road
Existing Roads and location
Proposed New Road
Malibu Fed. #4 Proposed location
Chalk Federal Battery
Malibu Fed # 1 Proposed access Rd
Proposed Malibu Fed #1 Location
EMPIRE OIL
PECOS RIVER
Brainard Lake
Scoggin Draw
Draw
Kaiser Channel
River Channel

PROPOSED ROAD, FLOWLINE AND POWERLINE SKETCH



PREPARED BY: DAN R. REDDY, NM PE&PS
PREPARED FOR: SDX RESOURCES, INC.
PREPARED: 9/28/00
SURVEYED 9/11/00

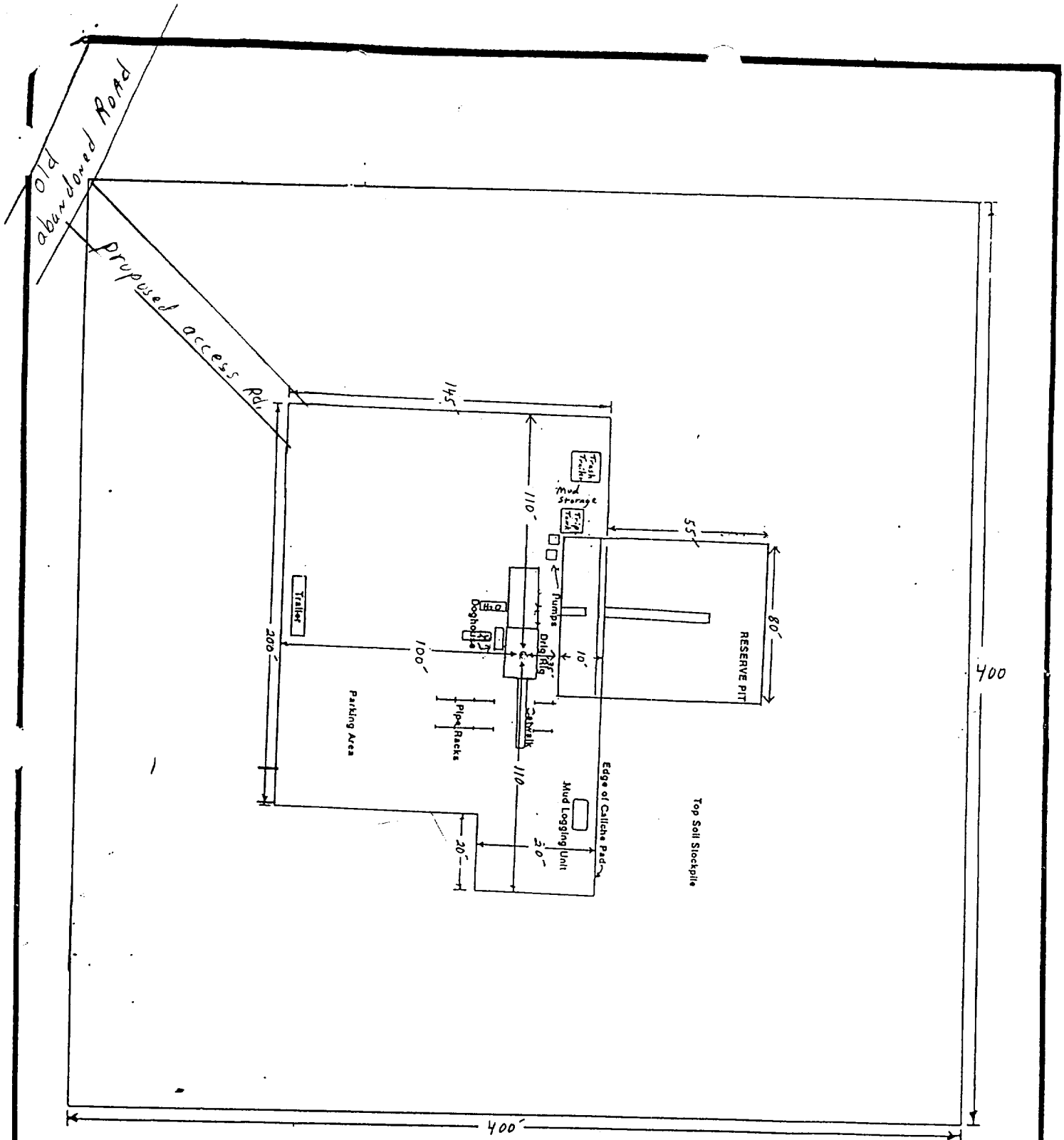
Exhibit #3B



SDX Resources, Inc.
MALIBU FEDERAL #1
1750' FSL 1650' FEL
Sec 5, T18S, R27E

ONE MILE RADIUS MAP

Exhibit #4



SDX RESOURCES, INC.

Drilling Rig Layout

Malibu Fed. #1

Exhibit #5

JRFACE USE AND OPERATIONS PLA
SDX RESOURCES, INC.
Malibu Federal # 1
1750' FSL, 1650' FEL
Unit J, Sec. 5, T18S, R27E
Eddy Co., NM

1. Existing Roads:

A. The well was staked by Dan Reddy in Carlsbad, N.M. and a survey plat is shown in exhibit #2.

B. All roads to the location are shown in Exhibit #3A & 3B. The existing rods are labeled and upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.

C. Directions to location: E. of Artesia on Hwy. 82 ~ 5 miles . Turn right on CR 201. Go 4.25 M on 201 and turn right 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 #3A & 3B show the existing roads and the new access road proposed to the Location.

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 successful:
1. The well will be tested and if commercial production is encountered a battery will be construced on the existing drilling pad. It will probably consist of 2-500 bbl. Stock tanks, a 500 bbl. Fiberglass water tank and a 4X20 heater treater.

2. A Power line will be built to location by Central Valley Electric Company. Proposed ROW is shown in exhibit 3B.

B. Rehabilitation plans are as follows:

1. The workover 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 re-entered 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:

No additional materials are necessary.

7. Methods of Handling Water Disposal:

A. Drill cuttings will be disposed into the workover pit.

B. Drilling fluids will be contained in steel pits. The workover pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The workover pit will be an earthen pit, approximately 80' x 55' x 6' deep, fenced, and plastic-lined (5-7 mil thickness).

C. Water produced from the well during completion may be disposed into the workover 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.

B. Exhibit #5 shows the planned orientation for the rig

C. The workover 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 anesthetically 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 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 raconteur 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:

BLM

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 will be performed and a formal report forwarded to the Carlsbad BLM office.

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.
Malibu Federal # 1
1750' FSL, 1650' FEL
Unit J, Sec. 5, T18S, R27E
Eddy Co., NM

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Queen	540'	Glorietta	2700'
Grayburg	990'	Yeso	2810'
San Andres	1200'		

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

Water Sand	100' & 750'	Fresh Water
San Andres	1500'	Oil & Gas

4. Casing Program:

Hole Size	Interval	OC Csg	Weight Grade Jt Cond Type
12-1/4"	0- 1150'	8-5/8	24#, J-55 New
7-7/8"	0 – 3500	5-1/2"	14#, J-55 New

Cement Program:

8-5/8" Surface casing — Cemented to surface with 200 sxs. "C" w/2% CACl and ¼#/sx flocele tail and 375 sxs. 35/65 POZ "C" with 6% gel (12.8 PPG slurry) with ¼#/sx flocele lead. Run 4 cenralizers.

5-1/2" Production Casing: — Cemented to surface with 600 sxs. "C".

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of an annular bag type preventer (2000 psi WP). Unit will be hydralically operated. BOP will be nippled up on the 8-5/8" 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)
0-1150	Fresh water	8.8		
1150 – 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 H2S detector will be continuously monitoring to TD.

8. Logging, Testing and Coring Program:

None

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 1000 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).

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 November 15, 2000. 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.
Malibu Federal # 1
1750' FSL, 1650' FEL
Sec. 5, T18S, R27E, Unit J
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.

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

SDX Resources Inc.
PO Box 5061
Midland, TX 79704

November 2, 2000

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.:	NM-105204
Lease Name:	Malibu Federal #1
Legal Description of Land:	Unit J, 1750' FSL 1650' FEL Sec. 5, T18S, R27E Eddy Co., NM
Formation (s):	Red Lake (QN-GB-SA)
Bond Coverage:	Statewide Bond – State of New Mexico
BLM Bond File No.:	NM2307

Authorized Signature:

John Pool
Vice-President

Ltrresp