

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

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

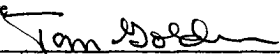
FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM 107379
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
2. Name of Operator Echo Production, Inc. 06742		7. If Unit or CA Agreement, Name and No.
3a. Address PO Box 1210, Graham, TX 76450		8. Lease Name and Well No. Sand Ranch '25' Federal #1
3b. Phone No. (include area code) 940-549-3292		9. API Well No. 30-005-63741
4. Location of Well (Report location clearly and in accordance with any State requirements*) At surface 2130' FNL & 660' FWL Unit E At proposed prod. zone		10. Field and Pool, or Exploratory Sand Ranch
14. Distance in miles and direction from nearest town or post office* 35 miles West of Roswell, NM		11. Sec., T. R. M. or Blk. and Survey or Area Section 25 T10S R29E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of acres in lease 640'	12. County or Parish Chaves
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. only well on lease	19. Proposed Depth 9800'	13. State NM
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3977' GR	20. BLM/BIA Bond No. on file NM 2692	22. Approximate date work will start* 11/1/04
23. Estimated duration 4 weeks		

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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature 	Name (Printed/Typed) Tom Golden	Date 9/9/04
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Title

Operations Manager

Approved by (Signature) /S/LARRY D. BRAY

Name (Printed/Typed)
/S/LARRY D. BRAY

NOV 09 2004

Title

Assistant Field Manager

Office
ROSWELL FIELD OFFICE

APPROVED FOR 1 YEAR

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, are attached.

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 page 2)

RECEIVED

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NSL

	OPERATOR CERTIFICATION <i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i> <div>Tom Golden Signature</div> <div>Tom Golden Printed Name</div> <div>Operations Manager Title</div> <div>9/07/09 Date</div>
	SURVEYOR CERTIFICATION <i>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.</i> <div>MAY 14, 2004 Date Surveyed</div> <div><div>Signature and Seal of Professional Surveyor</div><div></div></div> <div>Certificate No. Gary Jones 7977</div>

HOLE PROGNOSIS
FORM 3160-3 APPLICATION FOR PERMIT TO DRILL
ECHO PRODUCTION, INC.
SAND RANCH '25' FEDERAL #1
2130' FNL & 660' FWL
SECTION 25-10S-29E
CHAVES COUNTY, NEW MEXICO

In conjunction with Form 3160-3 Application for Permit to Drill, Echo Production, Inc. submits the following items in accordance with Onshore Oil and Gas Order Numbers 1 and 2, and all other applicable federal and state regulations.

1. Geological Name of Surface Formation:

Permian

2. Estimated Tops of Geologic Markers:

San Andres	2600'	Strawn	8270'
Glorieta	3950'	Atoka	8850'
Abo	6320'	Morrow	9150'
Wolfcamp	7150'	Barnett	9410'
Cisco Lime	7950'	Mississippian Lime	9500'

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

Surface	150'	Fresh Water
Wolfcamp	7150'	Oil or Gas
Cisco Lime	7950'	Oil or Gas
Atoka	8850'	Oil or Gas
Morrow	9150'	Oil or Gas
Mississippian	9500'	Oil or Gas

No other formations are expected to produce oil, gas or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" casing at 350' and circulating cement back to surface. Any shallower zones above TD that contain commercial quantities of oil and/or gas will have cement circulated across the zone.

HOLE PROGNOSIS
SAND RANCH '25' FEDERAL #1
PAGE 2

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight, Grade, JT. Cond. Type</u>
17 1/2"	0-350'	13 3/8"	48#, H-40, ST&C
11"	0-2650'	8 5/8"	24# J-55 LT&C
7 7/8"	0-TD	4 1/2"	11.6# N80 LT&C

5. Cementing Program:

Surface Casing: 13 3/8" casing will be set at approximately 350' and cemented with approximately 300 sacks of Premium Plus cement with 2% CaCl and additives. The amount may be adjusted depending upon the fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.

Intermediate Casing: 8 5/8" casing will be set at approximately 2650' and cemented with approximately 800 sacks of 35/65 Poz "c" with additives. The amount may be adjusted dependent upon fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.

Production Casing: If appropriate, 4 1/2" casing will be set at Total Depth. Echo will utilize cement in sufficient quantities to tie back 600' above any pay interval. Well will be cemented w/appropriate number of sacks of 50/50 POZ 'H' w/ additives and 100 sacks of 'C' Neat.

**HOLE PROGNOSIS
SAND RANCH '25' FEDERAL #1
PAGE 3**

6. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) show in Exhibit "A" will consist of a double ram-type (3000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4 ½" drill pipe rams on bottom. Both BOP's will be nipped up on the 13 3/8" surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 3000 psi and the hydril to 70% of rated working pressure (2100 psi).

7. Types and Characteristics of the Proposed Mud System:

O' to 350'	Fresh water with lime, gel paper and fiber will be used for drilling purposes. Weight 8.4 – 9.4, Vis 32-34, PH 9.
350' to 2650'	Brine with lime and ground paper. Weight 10.0, Vis 28, PH 10
2650' to 6200'	Brine with caustic soda and ground paper. Weight 10.0, Vis 28, Ph 10.
6200' to 8800'	Brine with caustic soda and starch. Weight 10.0-10.2, Vis 30-32, WL 10 cc, PH 10.
8800' to 9800'	Brine with caustic soda, starch and gel. Weight 10.1-10.4, Vis 32-60, WL 6-8 cc, PH 10.

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

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SAND RANCH '25' FEDERAL #1
PAGE 5

11. 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 1, 2004. Once commenced, the drilling operation will be completed in approximately 30 days. If the well is productive, an additional 15 days will be required for completion and testing before a decision is made to install permanent facilities. In conjunction with Form 3160-3, Application for Permit to Drill, Echo Production, Inc submits the following items in accordance with Onshore Oil and Gas Order Numbers 1 and 2, and all other applicable federal and state regulations.

**SURFACE USE AND OPERATING PLAN
FORM 3160-3 APPLICATION FOR PERMIT TO DRILL
ECHO PRODUCTION, INC.
SAND RANCH '25' FEDERAL #1
2130' FNL & 660' FWL
SECTION 25-10S-29E
CHAVES COUNTY, NEW MEXICO**

Submitted with Form 3160-5, Application for Permit to Drill covering the above proposed well. The purpose of the plan is to describe the location, the proposed construction activities, the operations, the surface disturbance involved, and the rehabilitation of the surface after completion of proposed well so that an appraisal can be made of the environment affected by the proposed well.

1. Existing Roads:

- A. The Well Location and Acreage Dedication Plat for the proposed wellsite was staked by Gary L. Jones, Registered Professional Surveyor, Carlsbad, New Mexico and is attached.
- B. All roads to the location are shown on Exhibit "B". The existing roads are adequate for travel during drilling and production operations.
- C. Directions to location: From the junction of Hwy 380 and Hwy 172 go west on Hwy 380 11.1 miles to a lease road. Go south for .1 miles to new lease road and east ¼ mile to location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as operations continue on the lease.

2. Proposed Access Road:

A new access road of approximately 1428' will be required as illustrated on Exhibit B.

- A. The average grade will be less than 5%.
- B. No turnouts will be necessary.
- C. No culverts, gates or low water crossing will be necessary.

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

**Operator Name: ECHO PRODUCTION, INC.
Street or PO Box: PO Box 1210
City, State: Graham, Texas
Zip Code: 76450**

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 107379 (Sand Ranch '25' Federal Com.)

Legal Description of Land: Sec 25 T10S R29E

Formation(s) (if applicable): Morrow & Mississippian

**Bond Coverage: (State if individually bonded or another's bond)
Statewide Bond - Echo Production, Inc.**

BLM Bond File No.: NM 2692

Authorized Signature:

Title: Operations Manager

Date: September 9, 2004

EXHIBIT "A"

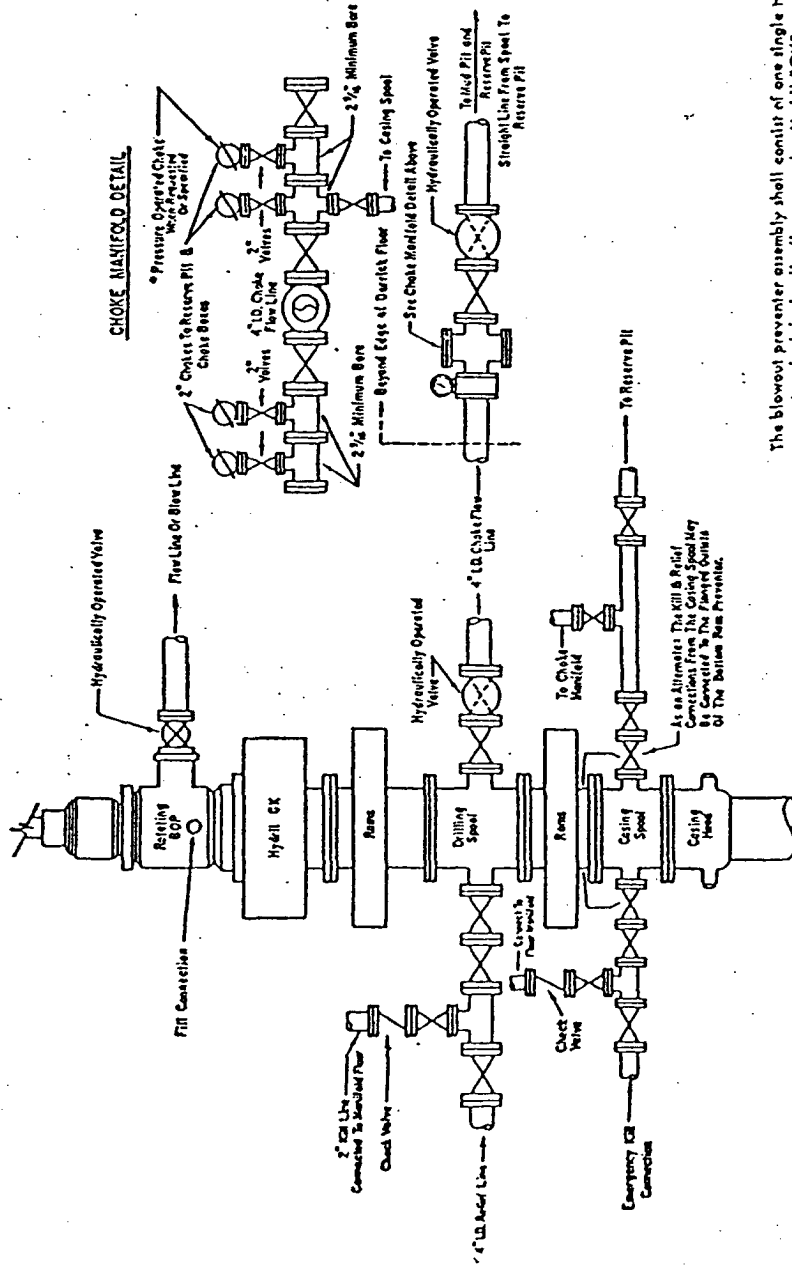
EQUIPMENT DESCRIPTION

All equipment should be at least 3,000 psi WP or higher unless otherwise specified.

1. Bell nipple
2. Hydril bag type preventer
3. Ram type pressure operated blowout preventer with blind rams.
4. Flanged spool with one 3" and one 2" (minimum) outlet.
5. 2" (minimum) flanged plug or gate valve.
6. 2"x 2"x 2" (minimum) flanged.
7. 3" gate valve.
8. Ram type pressure operated blowout preventer with pipe rams.
9. Flanged type casing head with one side outlet.
10. 2" threaded (or flanged) plug or gate valve. Flanged on 5000# WP, threaded on 3000# WP or less.
11. 3" flanged spacer spool.
12. 3"x 2"x 2"x 2" flanged cross.
13. 2" flanged plug or gate valve.
14. 2" flanged adjustable choke.
15. 2" threaded flange.
16. 2" XXH nipple.
17. 2" forged steel 90° Ell.
18. Cameron (or equal) threaded pressure gauge.
19. Threaded flange.
20. 2" flanged tee.
21. 2" flanged plug or gate valve.
22. 2 1/2" pipe, 300' to pit, anchored.
23. 2 1/2" SE valve.
24. 2 1/2" line to steel pit or separator.

NOTES:

- 1). Items 3, 4 and 8 may be replaced with double ram type preventer with side outlets between the rams.
- 2). The two valves next to the stack on the fill and kill line to be closed unless drill string is being pulled.
- 3). Kill line is for emergency use only. This connection shall not be used for filling.
- 4). Replacement pipe rams and blind rams shall be on location at all times.
- 5). Only type U, LSW and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.
- 6). Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.



3000 # PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

The blowout preventer assembly shall consist of one single type blind ram preventer and one single type pipe ram preventer, both hydraulically operated; a Hydril "GX" preventer; a rotating blowout preventer; valves; chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and 4-inch I.D. relief line, except when air or gas drilling. All preventer connections are to be open-face flanged.

Minimum operating equipment for the preventers and hydraulically operated valves shall be as follows: (1) Multiple pumps, driven by a continuous source of power, capable of fluid charging the total accumulator volume from the nitrogen precharge pressure to its rated pressure within _____ minutes. Also, the pumps are to be connected to the accumulators with a precharge of nitrogen of not less than 750 PSI and connected to as to receive the aforementioned fluid charge. With the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps or there shall be additional pumps operated by separate power and equal in performance capabilities.

hydraulic operating system which is to be a closed system. (2) Accumulators with a precharge of nitrogen of not less than 750 PSI and connected to as to receive the aforementioned fluid charge. With the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps or there shall be additional pumps operated by separate power and equal in performance capabilities.

The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating opening and closing positions. A pressure reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure reducer shall be available to limit operating fluid pressure to ram preventers. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, relief line, and choke line shall be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke line shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deemed necessary, walkways shall be erected in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves and relief line valves connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

* To include derrick floor mounted controls.

SECTION 25, TOWNSHIP 10 SOUTH, RANGE 29 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.

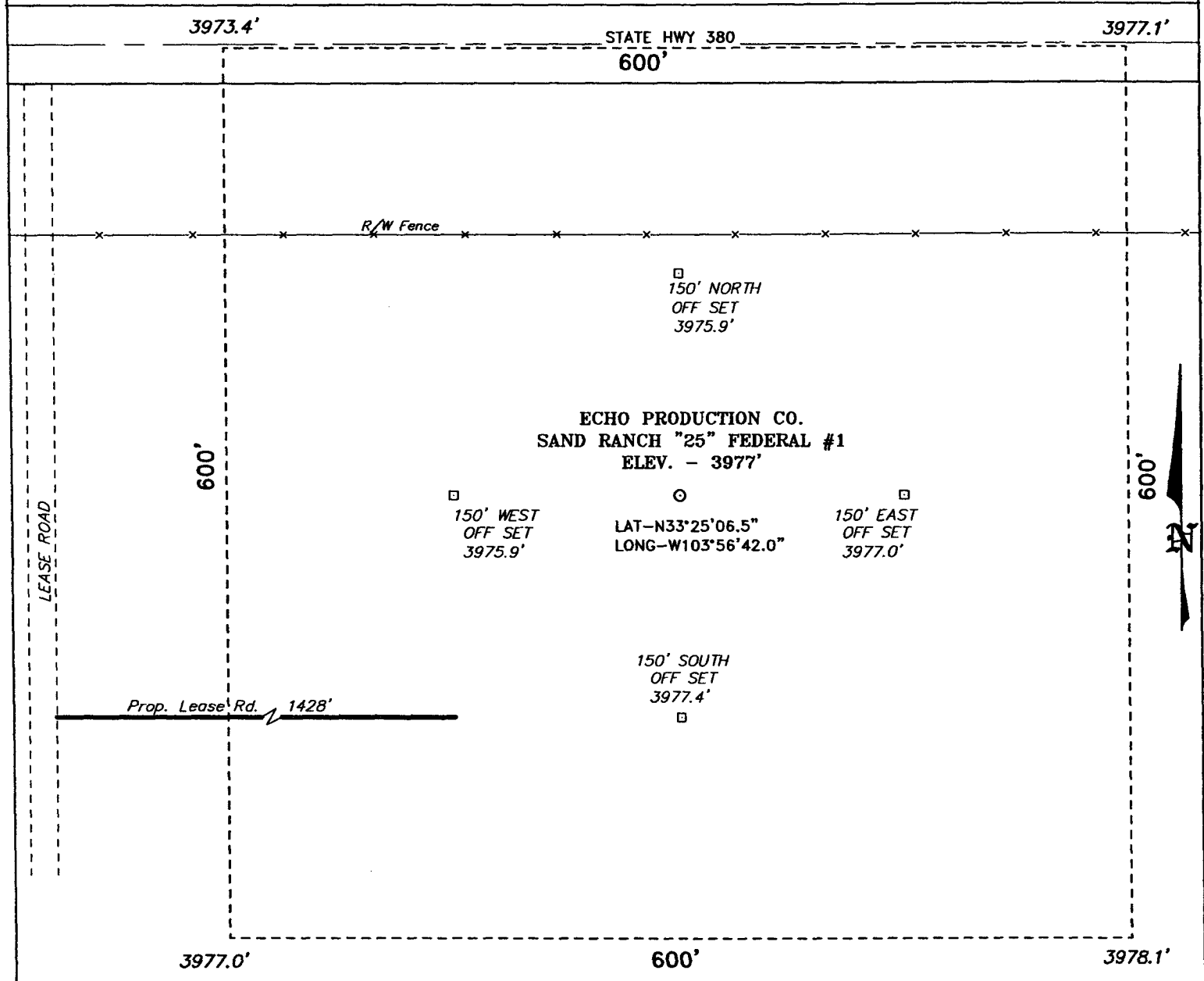
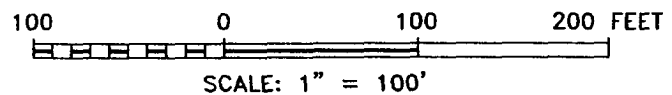


EXHIBIT 'B'



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF STATE HWY 380 AND STATE HWY 172, GO WEST FOR 11.1 MILES TO A LEASE ROAD; THENCE SOUTH FOR 0.1 MILE TO PROPOSED LEASE ROAD.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 4285 Drawn By: K. GOAD

Date: 05-18-2004 Disk: KJG CD#4 - 4285A.DWG

ECHO PRODUCTION CO.

REF: SAND RANCH "25" FED. COM No. 1 / Well Pad Topo

THE SAND RANCH "25" FED. COM No. 1 LOCATED 2130' FROM THE NORTH LINE AND 660' FROM THE WEST LINE OF SECTION 25, TOWNSHIP 10 SOUTH, RANGE 29 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO.

Survey Date: 05-14-2004 Sheet 1 of 1 Sheets