New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

Form 3160-3
(August 1999)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM106916
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA Agreement, Name and No.:
8. Lease Name and Well No.: East Livingston '31' Federal #2
9. API Well No.:
10. Field and Pool, or Exploratory: Livingston Ridge; Delaware SE
11. Sec., T., R., M., or Blk. and Survey or Area: Sec 31 T22S R32E

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator: Echo Production, Inc.

3a. Address: PO Box 1210, Graham, TX 76450

3b. Phone No. *(include area code)*: (940) 549-3292

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface: 1980' FNL & 330' FEL
At proposed prod. zone: Unit H

12. County or Parish: Lea
13. State: NM

14. Distance in miles and direction from nearest town or post office*: 30 miles east of Carlsbad, New Mexico

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 330'

16. No. of Acres in lease: 640

17. Spacing Unit dedicated to this well: 40

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 1320'

19. Proposed Depth: 8800'

20. BLM/BIA Bond No. on file: rotary

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3527' GR

22. Approximate date work will start*:

23. Estimated duration: 9/30/03

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: Tom Golden — Name *(Printed/Typed)*: Tom Golden — Date:

Title: Operations Manager

Approved by *(Signature)*: /S/ JOE G. LARA — Name *(Printed/Typed)*: /S/ JOE G. LARA — Date: AUG 19 2003

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)

OPER. OGRID NO. 6137
PROPERTY NO. 32583
POOL CODE 39380
EFF. DATE 8/25/03
API NO. 30-025-36381

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Carlsbad Controlled Water Basin

KZ

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

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, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-36381	39380	SE Livingston Ridge Delaware

Property Code	Property Name	Well Number
32583	EAST LIVINGSTON "31" FEDERAL	2

OGRID No.	Operator Name	Elevation
6742	ECHO PRODUCTION, INC.	3527'

Surface Location

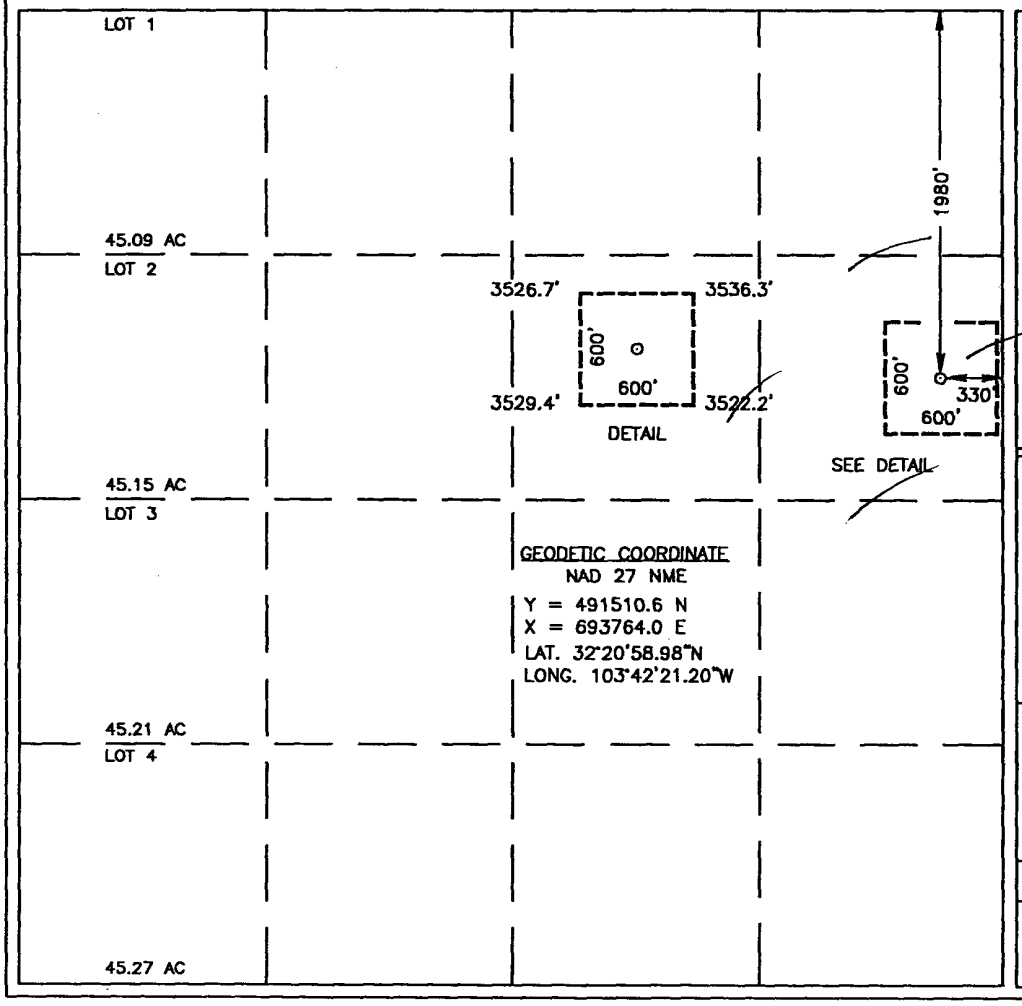
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	31	22-S	32-E		1980'	NORTH	330'	EAST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	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



OPERATOR CERTIFICATION

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

Tom Golden
Signature

Tom Golden
Printed Name

Operations Manager
Title

8/11/03
Date

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 supervison, and that the same is true and correct to the best of my belief.

June 20, 2003
Date Surveyed AWB

Signature & Seal of Professional Surveyor

GARY L. EIDSON
NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR

Gary L. Eidson 6/24/03

03.11.0639

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

HOLE PROGNOSIS
FORM 3160-3 APPLICATION FOR PERMIT TO DRILL
ECHO PRODUCTION, INC.
EAST LIVINGSTON '31' FEDERAL #2
1980' FNL & 330' FEL
SECTION 31-22S-32E
LEA 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:

Rustler	750'	Cherry Canyon	5650'
Top of Salt	900'	Brushy Canyon	7100'
Base of Salt	4260'	Lower Brushy Canyon	8150'
Lamar	4550'	Bone Spring	8450'
Bell Canyon	4600'	Avalon Sand	8700'

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

Surface	150'	Fresh Water
Delaware	7100'-8450'	Oil or Gas
Bone Spring	8450'	Oil or Gas
Avalon Sand	8700'	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 800' 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.

4. Casing Program:

Hole Size	Interval	OD Csg	Weight, Grade, JT. Cond, Type
17 ½"	0-800'	13 3/8"	48#, H-40, ST&C
11"	0-4550'	8 5/8"	24# & 32#, J-55, S-80, LT&C
7 7/8"	0-TD	5 ½"	17#

5. Cementing Program:

Surface Casing: 13 3/8" casing will be set at approximately 800' and cemented with approximately 670 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 4550' and cemented with approximately 1300 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, 5 ½" casing will be set at Total Depth. Echo will utilize cement in sufficient quantities to tie back 600' above any Delaware pay. Well will be cemented w/appropriate number of sacks of 50/50 POZ 'H' w/ additives and 100 sacks of 'C' Neat.

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 nippled 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 800'	Fresh water with lime, gel paper and fiber will be used for drilling purposes. Weight 8.4 – 8.6, Vis 29-36, PH > 8.
800' to 4550'	Saturated brine water purchased from commercial sources with paper and fiber will be utilized. Weight 8.6-10.5, Vis 32-34, Ph 10.
4700' to 8800'	Brine and fresh water purchased from commercial sources with gel and starch, 3% KCl, 20-50 PPM Nitrates, Cl 30-75,000, caustic for control and paper for seepage will be utilized. Weight 8.5 – 8.9, Vis 29-34, Ph 9-10, WL 20-50.

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.

8. Auxiliary Well Control and Monitoring Equipment:

A. A kelly cock will be kept in the drill string at all times.
B. A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

9. Testing, Logging and Coring Program:

A Mudlogging unit will be on location from top of Delaware formation to TD. Mudlogging unit will be employed from approximately 4400' to 8800' (Total Depth).

If indicated, AIT-GR, CNL-LDT-GR logs and Caliper logs will be run at TD. The Gamma Ray AIT will be run from TD back to the intermediate casing. The Gamma Ray Compensated Neutron Log will be run from TD back to surface. If indicated, Echo may elect to run rotary sidewall cores from selected intervals from approximately 7100' to 8800' dependent upon logging results.

10. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. Anticipated bottomhole pressure is 3600# PSI.

Loss of circulation is possible in the Delaware section of the hole, however, no major loss circulation zones have been reported in offsetting wells.

Six wells have been drilled and completed in the immediate area. To date, Hydrogen Sulfide has not been encountered. However, if Hydrogen Sulfide is encountered, a Hydrogen Sulfide training and appropriate breathing apparatus is located on site. If necessary, the well can be shut in utilizing the blow out preventer and other equipment to prevent the migration of Hydrogen Sulfide to the surface.

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 September 30, 2003. Once commenced, the drilling operation will be completed in approximately 20 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.
EAST LIVINGSTON '31' FEDERAL #2
1980' FNL & 330' FEL
SECTION 31-22S-32E
LEA 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 Eidson, 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 and no new roads will be required.

   C. Directions to location: From Carlsbad; go east to county road 1 mile west of Lea and Eddy County line. Go north 7 miles and turn east on lease road ±2 miles then south 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 1320' 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.

D. Surfacing material will consist of native caliche. If required, road across pad will be surfaced with a minimum of 6" of caliche. Caliche will be obtained from the nearest BLM approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.

3. Location of Existing Wells:

All existing wells within a one mile radius of proposed well are show on Exhibit "C".

4. Location of Existing and/or Proposed Facilities:

In the event the proposed well proves to be productive Echo Production, Inc. will furnish plats showing "on well pad" facilities and "off well pad" facilities (if necessary) by Sundry Notice prior to construction.

5. Location and Type of Water Supply:

The proposed well will be drilled with a combination of brine and fresh water mud systems as outlined in the Hole Prognosis. The water will be purchased from commercial water stations in the area and trucked to the location by transport over the existing access roads as indicated on Exhibit "B". No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad will be obtained from a BLM approved caliche pit. 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 steel mud tanks. 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 150' x 150' x 6' deep and fenced on three sides prior to drilling. The fourth side will be fenced immediately following rig removal. 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. Drilling fluids will be allowed to evaporate in the reserve pits until dry.

C. Water produced from the proposed well during completion may be disposed into the reserve pit or a steel tank (depending upon rates). After the proposed well is permanently placed on production, produced water will be collected in a fiberglass tank and piped to an approved disposal system. Produced oil will be collected in steel tanks until sold.

D. A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations. Compliance with current laws and regulations will be followed pertaining to the disposal of human waste.

E. Garbage and trash produced during drilling or completion operations will be disposed in a separate trash trailer on location. All waste material will be contained to prevent scattering by the wind. 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 the operation.

F. After the rig is moved out and the proposed well is either completed or abandoned, all waste materials will be removed within 30 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until 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 portion of the pad required for production operations will remain in use. In the event of a dry hole, only a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite or other facility will be built as a result of the operations of the proposed well.

9. Well Site Layout:

A. The drill pad layout is shown on Exhibit "D". Dimensions of the pad, 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. Since the pad is fairly level no major cuts will be required.

B. Planned orientation for the rig and associated drilling equipment, reserve pit, pipe racks, turn-around and parking areas, and access road are shown on Exhibit "D". No permanent living facilities are planned, however, a temporary foreman/toolpusher's trailer will be on location during drilling operations.

C. The reserve pit will be lined with a high quality plastic sheeting (5-7 mil thickness).

10. Plan for Restoration of the Surface:

A. Upon completion of the proposed operations, should the proposed well be abandoned, the pit area, after allowed to dry, will be broken out and leveled. The original topsoil will be returned to the entire location, and leveled and contoured to the original topography as closely as possible.

All trash, garbage and pit lining will be removed in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled with 120 days after abandonment.

B. The disturbed area will be revegetated and reseeded during the proper growing season with a seed mixture of native grasses as recommended by the BLM.

C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time the rig is removed, the reserve pit will be fence on the rig (fourth) side to prevent livestock or wildlife from becoming entrapped. The fencing will remain in place until the pit area is cleaned and leveled. No oil will be left on the surface of the fluid in the pit.

D. Upon completion of the proposed operations, should the proposed well be productive, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from an area of the original drillsite not needed for production operations or facilities will be removed and used for construction of thicker pads or firewalls for the tank batter installation. Any additional caliche required for facilities will be obtained from a BLM approved caliche pit. Topsoil removed from the drillsite will be used to recontour the pit area and unused portions of the drill pad to the original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

The wellsite and lease are located entirely on Federal surface.

12. Other Information:

A. The topography around the wellsite is rolling terrain with vegetation of sagebrush and native grass. The vegetation cover consists of prairie grasses and flowers. Wildlife in the area includes those typical of semiarid desert land.

B. The soils are clayey sand over caliche base.

C. There is no permanent or live water in the immediate area.

D. There are no residences and other structures in the area.

E. The land in the area is used primarily for grazing purposes.

F. An archaeological study is attached.

13. Lessee's and Operator's Representative:

Tom Golden
PO Box 1210
Graham, Texas 76450
Phone Number: (940) 549-3292 – office
(940) 521-1045 – cellular
(940) 549-3690 – home

14. Certification:

I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite which currently exists; that the statements made in the plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Echo Production, Inc. and its contractors and sub-contractors in conformity with the plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 USC 1001 for the filing of a false statement.

ECHO PRODUCTION, INC.

Tom Golden _____ DATE: July 16, 2003
Tom Golden
Operations Manager

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.

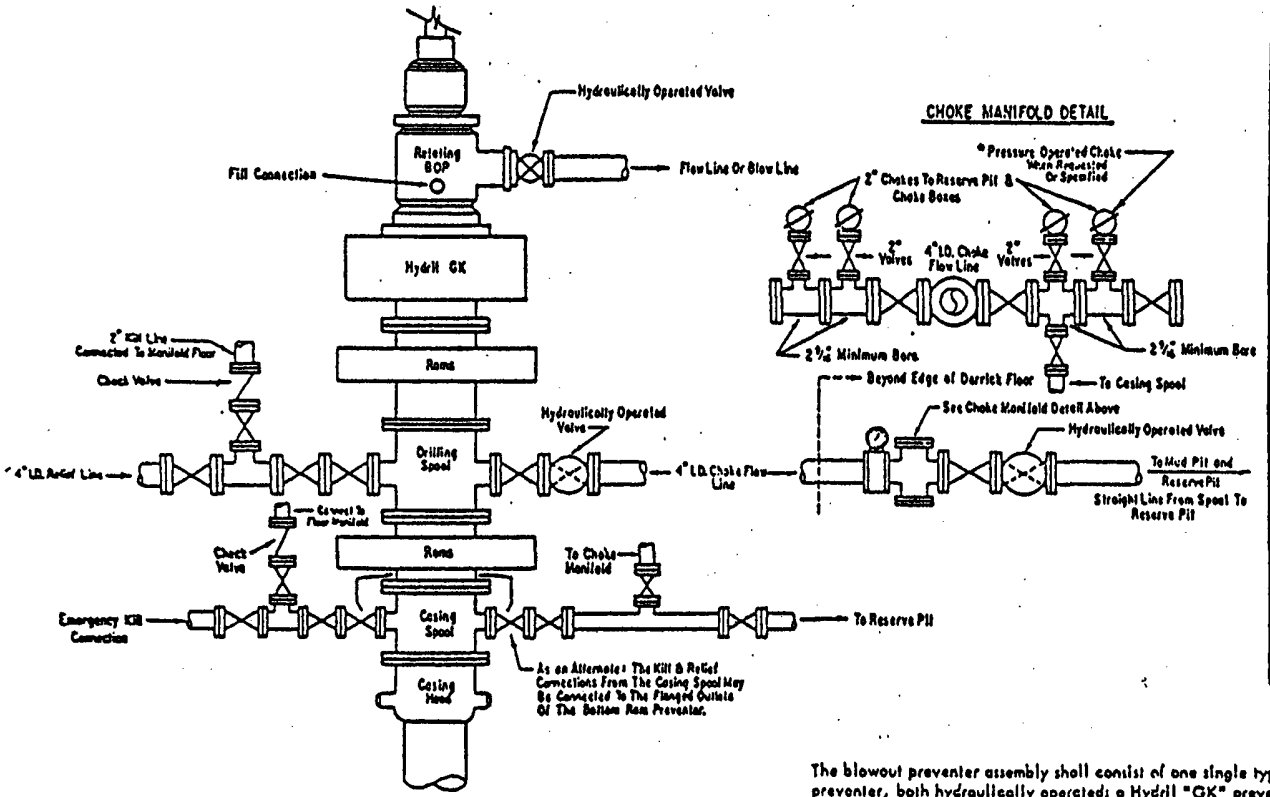
2). The two valves next tho the stack on the fill and kill line to be closed unless drill string is being pulled.

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 "GK" 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 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 so as to receive the aforementioned fluid charge. With the charging pumps shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within_____ seconds, after which 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.

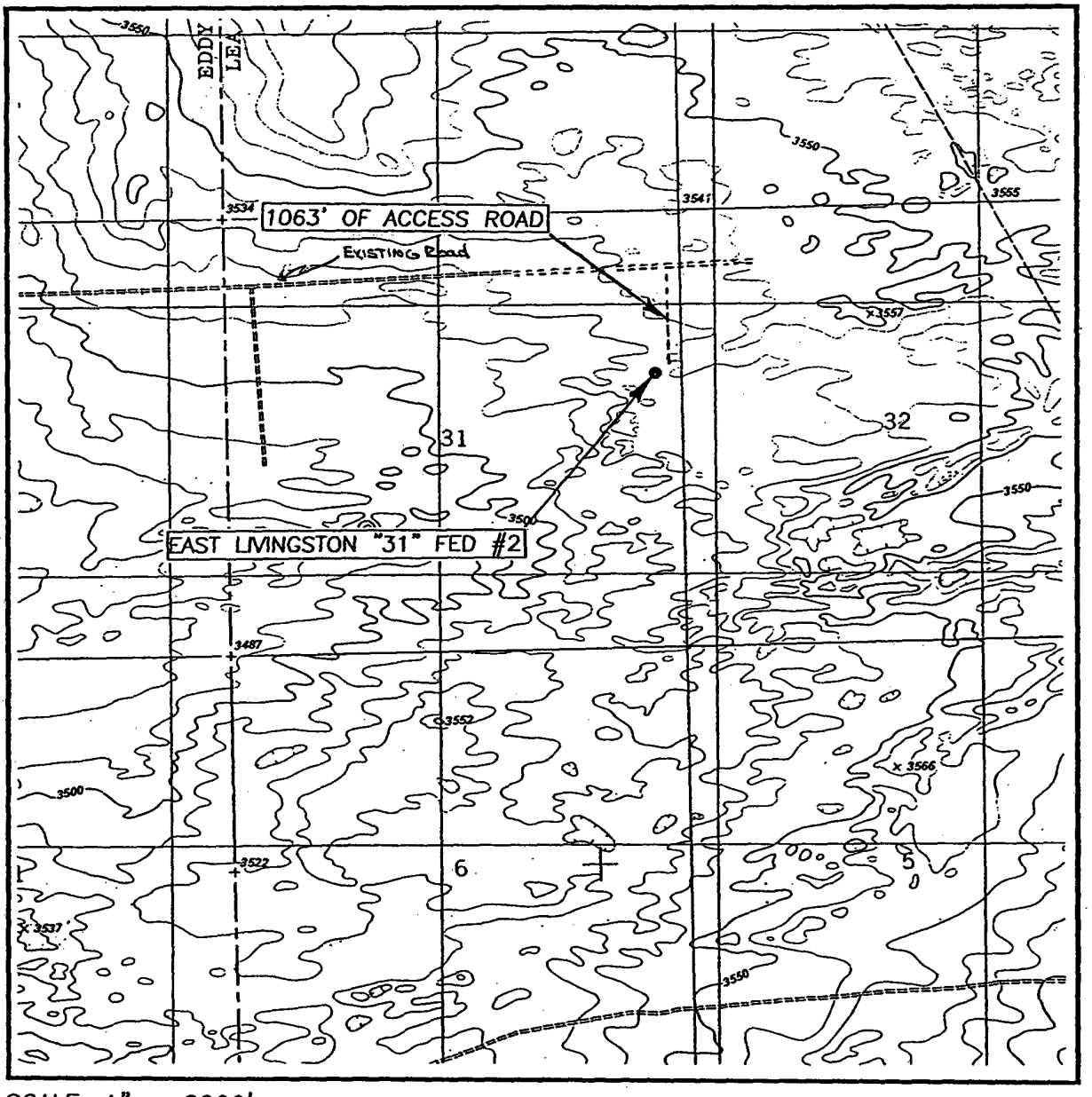
The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure reducer shall be available to limit operating fluid pressures 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 lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines 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 and stairways 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.

Exhibit 'A'

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
BOOTLEG RIDGE, N.M.

SEC. 31 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1980' FNL & 330' FEL

ELEVATION 3527'

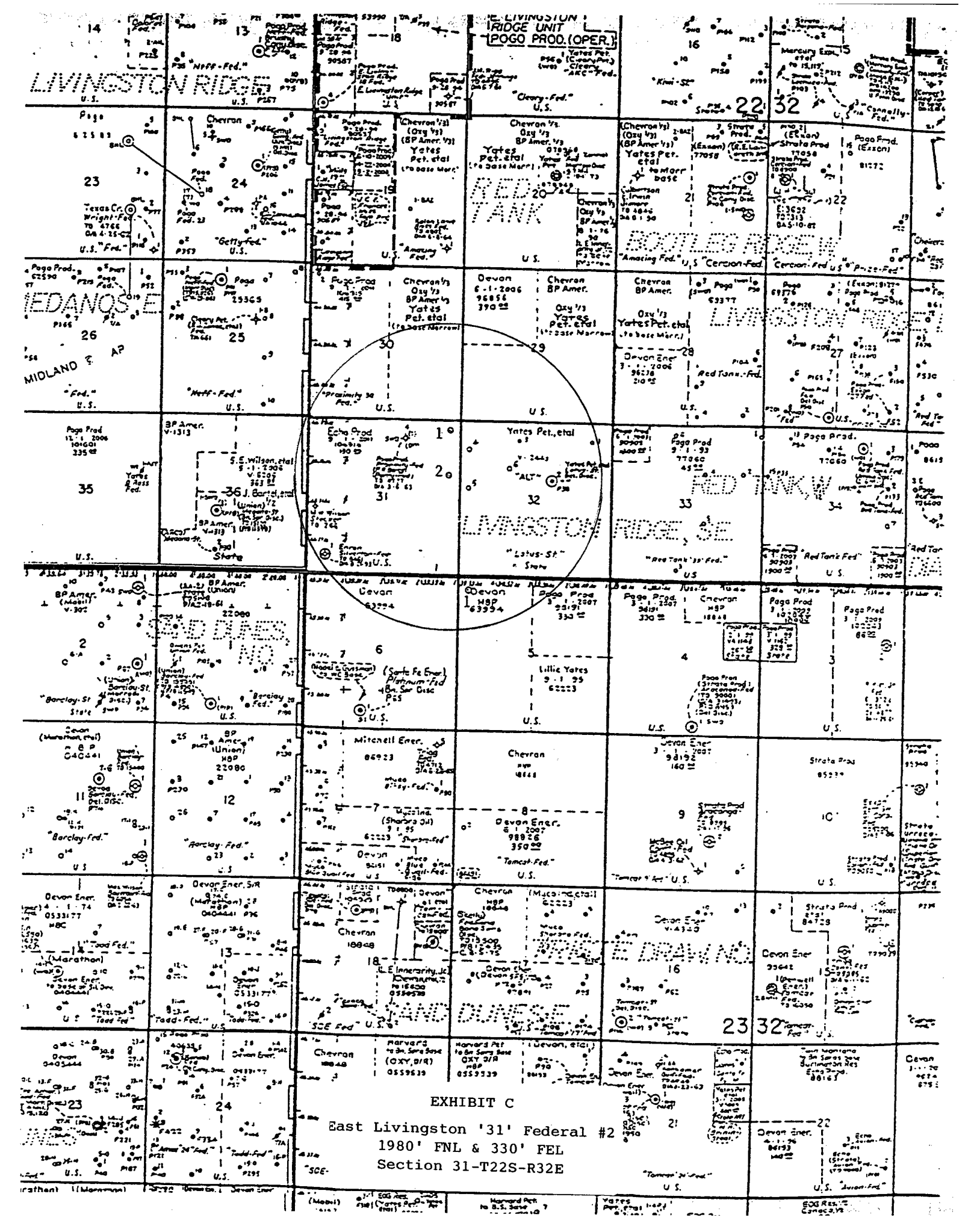
OPERATOR ECHO PRODUCTION, INC.

LEASE EAST LIVINGSTION "31" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
BOOTLEG RIDGE, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

EXHIBIT 'B'


LIVINGSTON RIDGE
E. LIVINGSTON RIDGE UNIT
POGO PROD. (OPER.)
RED TANK
LIVINGSTON RIDGE SE
MIDLAND AP
RED TANK NW
Devon Energy
Chevron
Yates Pet. etal
Pogo Prod.
Mitchell Energy
Strata Prod.
Marathon
Harvard Pet.
Texas Cr. Wright-Fed.
Getty-Fed.
Cleary-Fed.
Barclay-Fed.
Todd-Fed.
Tomcat-Fed.
Sharbro-Fed.
Platinum-Fed.
Red Tank-Fed.
Lotus-St.
Barclay-St.
Sante Fe Energy
Lillie Yates
Echo Prod.
Devon Energy
Oxy 1/3
BP Amer. 1/3
Yates Pet. etal
Chevron 1/3
Oxy 1/3
BP Amer. 1/3
Yates Pet. etal
Devon
6-1-2006
96856
390 oil
Chevron
BP Amer.
Oxy 1/3
Yates Pet. etal
Devon Ener.
3-1-2006
96378
210 oil
Pogo Prod.
12-1-2006
101601
335 oil
BP Amer.
V-1313
S.E. Wilson, etal
5-1-2006
V-6207
363 oil
J. Bartel, etal
(Union) 1/2
BP Amer. 1/2
V-1313
Pogo Prod.
9-1-93
77660
45 oil
Pogo Prod.
3-1-2007
96191
330 oil
Chevron
HBP
63994
Devon
63994
Pogo Prod.
3-1-2007
96191
330 oil
Chevron
HBP
18848
Pogo Prod.
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96191
330 oil
Pogo Prod.
3-1-2007
96191
330 oil
Mitchell Ener.
86923
Chevron
HBP
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Devon Ener.
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Strata Prod.
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Devon Ener.
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HBC
Devon Ener. SW
9-1-76
0405441
HBC
Chevron
18848
Devon Ener.
V-4349
Strata Prod.
84729
Devon Ener.
95648
Chevron
18848
Harvard Pet.
to Bs Sans Sand
(OXY, BTA)
HBP
0559539
Harvard Pet.
to Bs Sans Sand
OXY 2/3
HBP
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EXHIBIT C
East Livingston '31' Federal #2
1980' FNL & 330' FEL
Section 31-T22S-R32E

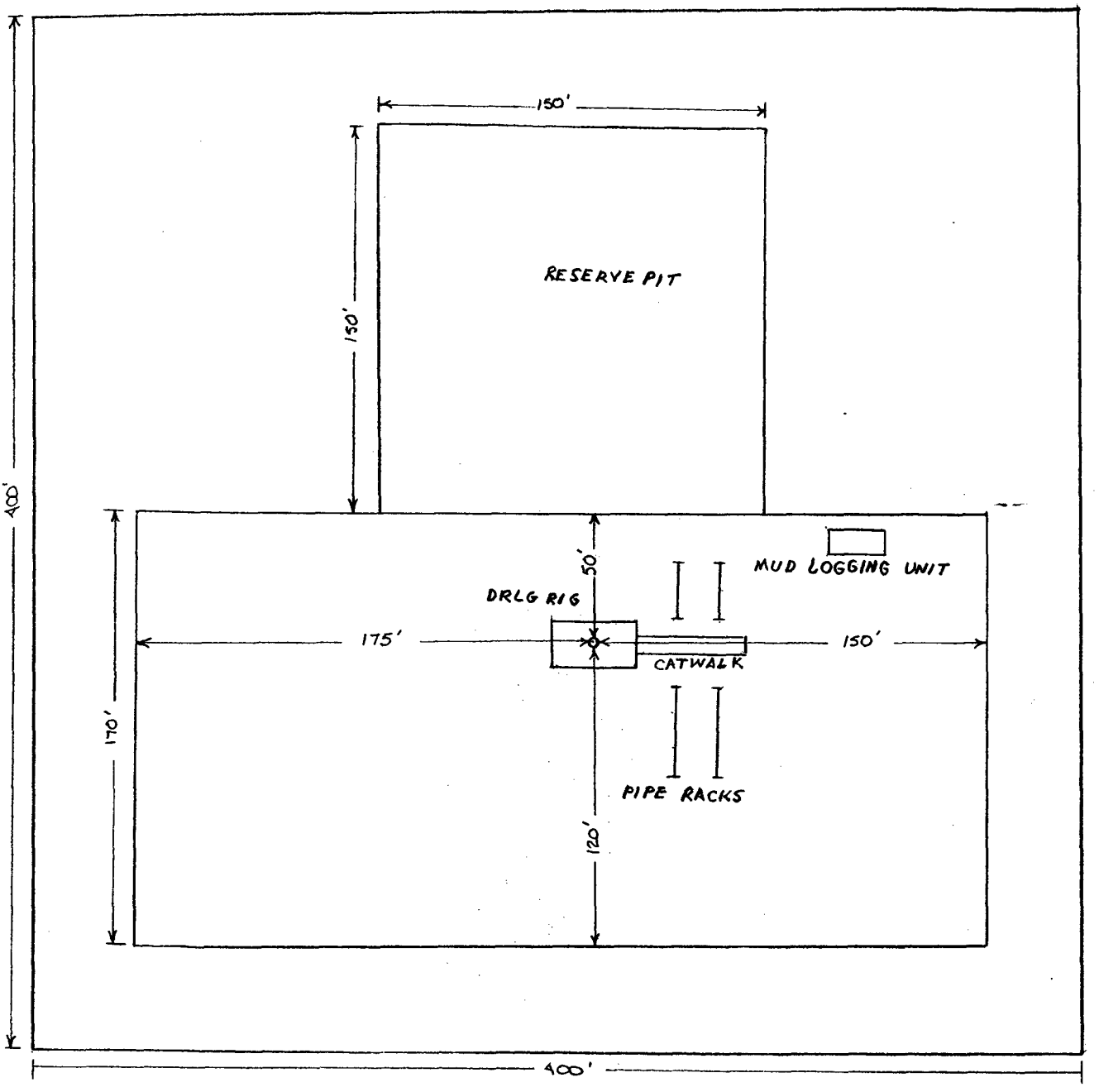

EXHIBIT D

East Livingston '31' Federal #2
1980' FNL & 330' FEL
Section 31-T22S-R32E

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 NM106916 (East Livingston '31' Federal)

Legal Description of Land: All of Sec 31 T22S R32E except SW/4 of SW/4

Formation(s) (if applicable): Delaware

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: July 16, 2003

BLM Rel. 8-20 10/25/02

1. (For BLM Use) **BLM Report No.**	**2. (For BLM Use)** **Reviewers Initials/Date**_____ **Accepted ( ) Rejected ( )**	**3. NMCRIS Number:** 84189

4. Type of Report: **Negative** (yes) **Positive ( )**

5. Title of Report:

A Class III Cultural Resource Inventory for
The East Livingston "31" Federal Number 1 Proposed Well Location
And the East Livingston "31" Federal Number 2 Proposed Well Location and Associated Access Road
Section 31, T.22S, R.32E,
Lea County, New Mexico

Author(s): Richard W. Walter

6. Fieldwork Date(s): 29-June-2003	**7. Report Date:** 07-July-2003

8. Consultant Name/Address: Southern New Mexico Archaeological Services, Inc.
Address: Post Office Box 1, Bent, New Mexico 88314
Direct Charge: Joe Ben Sanders
Field Personnel Name(s): Allen S. Rorex
Phone Number: (505) 671-4797

9. Cultural Resource Permit Number: 145-2920-03-L	**10. Consultant Report Number:** SNMAS-03NM-1149
11. Customer Name: Echo Production, Inc. **Responsible Individual:** Tom Golden/Joe Janica **Address:** Post Office Box 1210 Graham, Texas 76450 **Phone Number:** (940) 549-3292	**12. Customer Project Number:**

13. Land Status	**BLM**	**State**	**Private**	**Other**	**Total**
a. Area Surveyed (acres)	19.2				19.2
b. Area of Effect (acres)	8.3				8.3

14. Linear **Length**: 763 ft **Width:** 150 ft

15. Location (Map[s] Attached)

a. State: New Mexico
b. County: Lea
c. BLM Office: Carlsbad
d. Nearest City or Town: Ochoa
e. Legal Description: T.22S, R.32E, Sec(s) 31:
Well Pad 1/4s for East Livingston "31" Federal Number 1: E ½, NE ¼, NE ¼
Well Pad 1/4s for East Livingston "31" Federal Number 2: E ½, SE ¼, NE ¼
Access Road for East Livingston "31" Federal Number 2: SE ¼, NE ¼, NE ¼; NE ¼, SE ¼, NE ¼
f. Well Pad Footages:
East Livingston "31" Federal Number 1: 660 ft FNL and 330 ft FEL
East Livingston "31" Federal Number 2: 1,980 ft FNL and 330 ft FEL
g. USGS 7.5' Map Name(s), Date(S), and Code(s): Bootleg Ridge, NM, 1984, 32103-C6

16. Project Data:

a. Records Search: **Date(s) of BLM field Review:** 26-June-2003
Name of Reviewer(s): Allen S. Rorex
Date of ARMS Data Review: 25-June-2003
Name of Reviewer(s): Doralene Sanders

Findings (see Field Office requirements to determine area to be reviewed during records search): BLM Record Check Maps and ARMS records indicate that there are no sites within a one mile-radius of the project area.

b. Description of Undertaking: A Class III Cultural Resource Survey was conducted at the proposed East Livingston "31" Federal Number 1 and the East Livingston "31" Federal Number 2 well locations and an associated access road at the request of Echo Production, Inc. The newly proposed well locations and access road are staked in Section 31, T.22S, R.32E, Lea County, New Mexico. The East Livingston "31" Federal Number 1 is staked at 660 ft FNL and 330 ft FEL of Section 31. The East Livingston "31" Federal Number 2 is staked at 1,980 ft FNL and 330 ft FEL of Section 31. The impact area for both well locations is 400 ft by 400 ft. The survey area for both well locations is 600 ft by 600 ft. The proposed access road associated with the proposed East Livingston "31" Federal Number 2 is 1,063 ft long. Approximately 300 ft of the access road is within the 600 ft by 600 ft survey areas for the both of the proposed well pads (150 ft within each of the 600 ft by 600 ft survey areas). The proposed access road begins at an existing lease road within the 600 ft by 600 ft survey area for the proposed East Livingston "31" Federal Number 1 and trends south approximately 1,063 ft to the northeastern portion of the proposed East Livingston "31" Federal Number 2 well location. The impact area for the proposed access road is 763 ft by 50 ft. The survey area for the proposed access road is 763 ft by 150 ft.

c. Environmental Setting (NCRS soil designation: vegetative community; elevation; etc.): The project is situated on a plain covered with low semi-stabilized dunes. Larger dunes are stabilized by both Mesquite and Shinoak. Elevation ranges from the bottom of interdune areas to the top of dunes approximately 0.2m to 1.0 m. The area is internally drained with interdunal ponding occurring after periodic rains. The vegetative community is characterized as a Plains-Mesa Sand Scrub assemblage. Flora within the project area includes Shinoak, Sand Sagebrush, Torrey Mesquite, Fineleaf Yucca, Tree Cholla, Spectaclepod, Prairie Pricklypear, and various species of grasses. Elevation ranges approximately 3,520 to 3,540 ft above msl. The area is used primarily for oil exploitation and ranching.

d. Field Methods (transect intervals; crew size; time in field, etc.): The survey was conducted by walking 12 transects over each of the staked well locations. The access road was surveyed by walking at 15 m intervals parallel to, and on either side of the right-of-way centerline. Time in the field was 8 hours.

e. Artifacts Collected? No

17. Cultural Resource Findings: No cultural resources were encountered.
a. Location/Identification of Each Resource: N/A
b. Evaluation of Significance of Each Resource: N/A

18. Management Summary (Recommendations): During the current survey, no cultural resources were encountered. Therefore, **archaeological clearance is recommended** for the proposed **East Livingston "33" Federal Number 1 and the East Livingston "33 Federal Number 2 well locations and associated access road,** located in Section 31, T.22S, R.32E, **with no stipulations.**

19.
I certify the information provided above is correct and accurate and meets all applicable BLM Standards.

Responsible Archaeologists _____ 7/7/03
Signature Date
For, Allen S. Rorex
Field Supervisor

THE ABOVE COMPLETES A NEGATIVE REPORT. IF ELIGIBLE OR POTENTIALLY ELIGIBLE PROPERTIES ARE INVOLVED, THE ABOVE WILL BE THE TITLE PAGE AND ABSTRACT FOR A COMPLETE REPORT.

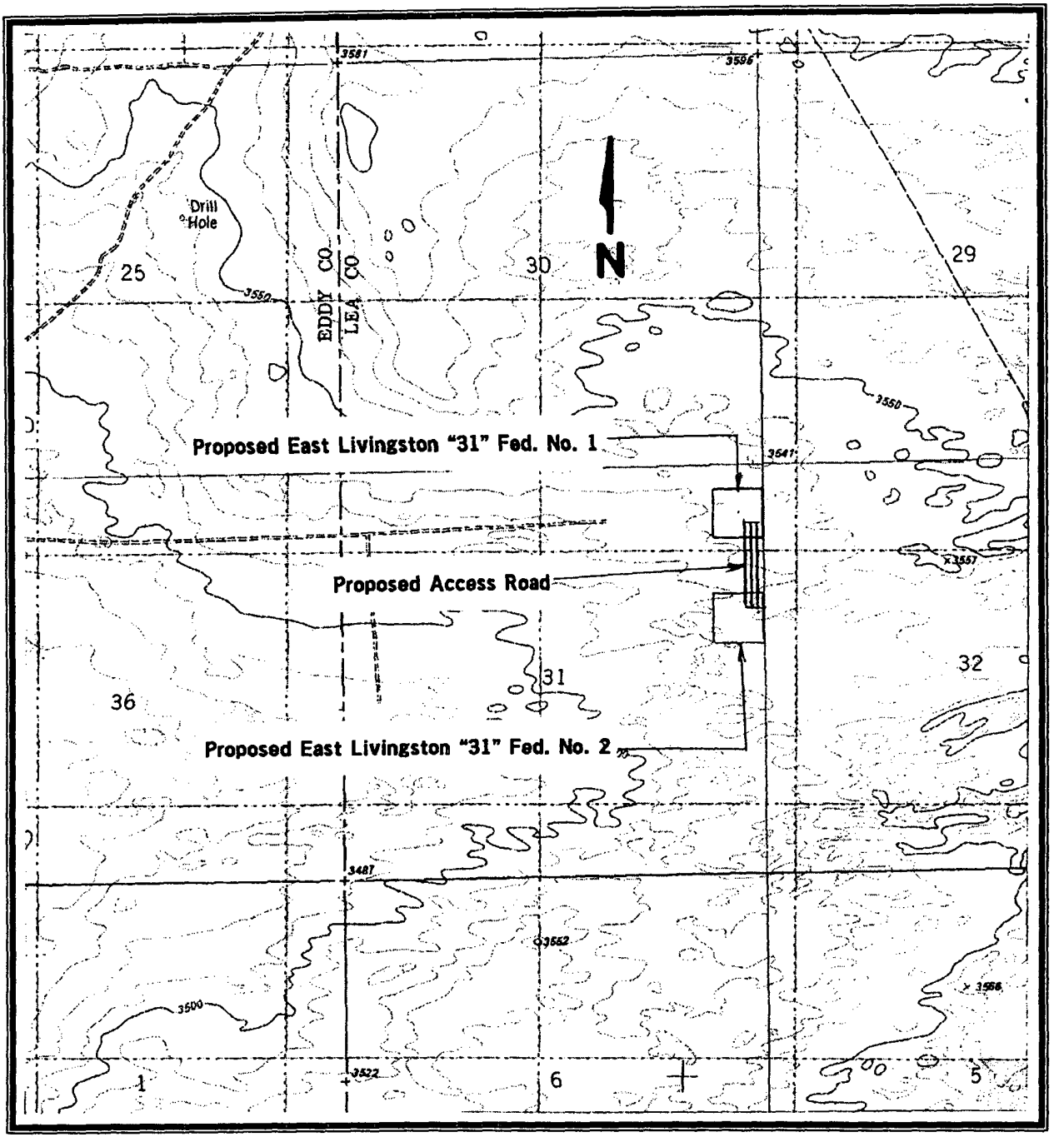

Figure 1: Echo Production, Inc. Survey Area for the Proposed East Livingston "31" Federal Number 1 Well Location and the East Livingston "31" Federal Number 2 Well Location and Associated Access Road
Section 31, T.22S, R. 32E
USGS Bootleg Ridge, NM; (1984) 7.5' topo map
Lea County, New Mexico

Southern New Mexico Archeological Services, Inc.