

APPROVAL NO. 154903
 COMPLETION NO. 19225
 POOL CODE 65360
 EFF. DATE 8-29-01
 API NO. 30-025-35679

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No. NM-9016
6. If Indian, Allottee or Tribe Name
7. If Unit or CA Agreement, Name and No.
8. Lease Name and Well No. Inca Federal #14
9. API Well No. 30-025-35679
10. Field and Pool, or Exploratory Young Queen
11. Sec., T., R., M., or Blk. and Survey or Area Sec 17-T18S-R32E UL:D
12. County or Parish Lea
13. State NM

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone	
2. Name of Operator St. Mary Land & Exploration c/o Nance Petroleum Corporation	
3a. Address P. O. Box 7168 - Billings, MT 59103	3b. Phone No. (include area code) (406)245-6248
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 990' FNL & 330' FWL At proposed prod. zone Same	
14. Distance in miles and direction from nearest town or post office* 16 Miles SE of Loco Hills	
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 1004.23
17. Spacing Unit dedicated to this well 40	18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft. 1070' (Inca Fed #13)
19. Proposed Depth 3900'	20. BLM/BIA Bond No. on file 6041872
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3753' GL	22. Approximate date work will start* 8/20/01
23. Estimated duration 7-8 Days	

24. Attachments **Carbon Controlled Water Basin**

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

25. Signature <i>Herb Thackeray</i>	Name (Printed/Typed) Herb Thackeray	Date 07/09/01
Title Operations Engineer		
Approved by (Signature) /S/ JOE G. LARA	Name (Printed/Typed) /S/ JOE G. LARA	Date AUG 27 2001
Title 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)

**DECLARED WATER BASIN
 CEMENT BEHIND THE 8 1/2"
 CASING MUST BE CIRCULATED**

**APPROVAL SUBJECT TO
 GENERAL REQUIREMENTS AND
 SPECIAL STIPULATIONS
 ATTACHED**

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2001 JUL 23 AM 8:57

BUREAU OF INDIAN AFFAIRS
WASHINGTON, D.C. 20546

27 JUL 2001

121 JOE G. LARA

121 JOE G. LARA

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., Artec, 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 30-025-35679	Pool Code 65360	Pool Name Young; Queen
Property Code 19225	Property Name INCA FEDERAL	Well Number 14
OGRID No. 154903	Operator Name ST MARY LAND & EXPLORATION CO.	Elevation 3753'

Surface Location

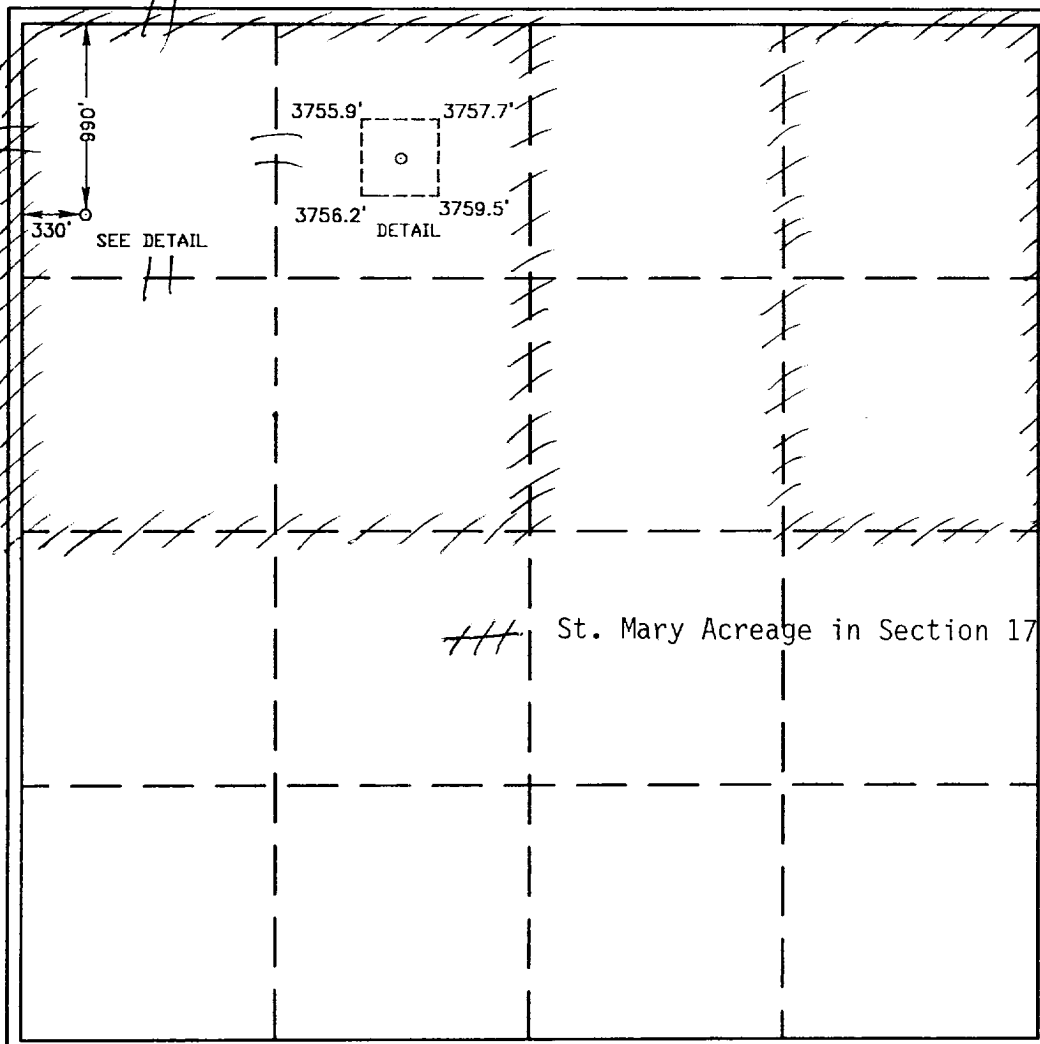
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	17	18-S	32-E		990	NORTH	330	WEST	LEA

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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature Herb Thackeray</p> <p>Printed Name Herb Thackeray</p> <p>Title Operations Engineer</p> <p>Date 06/28/01</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JUNE 18, 2001</p> <p>Date Surveyed AWB</p> <p>Signature & Seal of Professional Surveyor Ronald J. Edson</p> <p>Certificate No. RONALD J. EDSON 3239 CARY EDSON 12841</p>
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STATION



CONTOUR INTERVAL: 10'
MALJAMAR, N.M.

SURVEY _____ N.M.P.M.

COUNTY LEA

DESCRIPTION 990' FNL & 330' FWL

ELEVATION 3753'

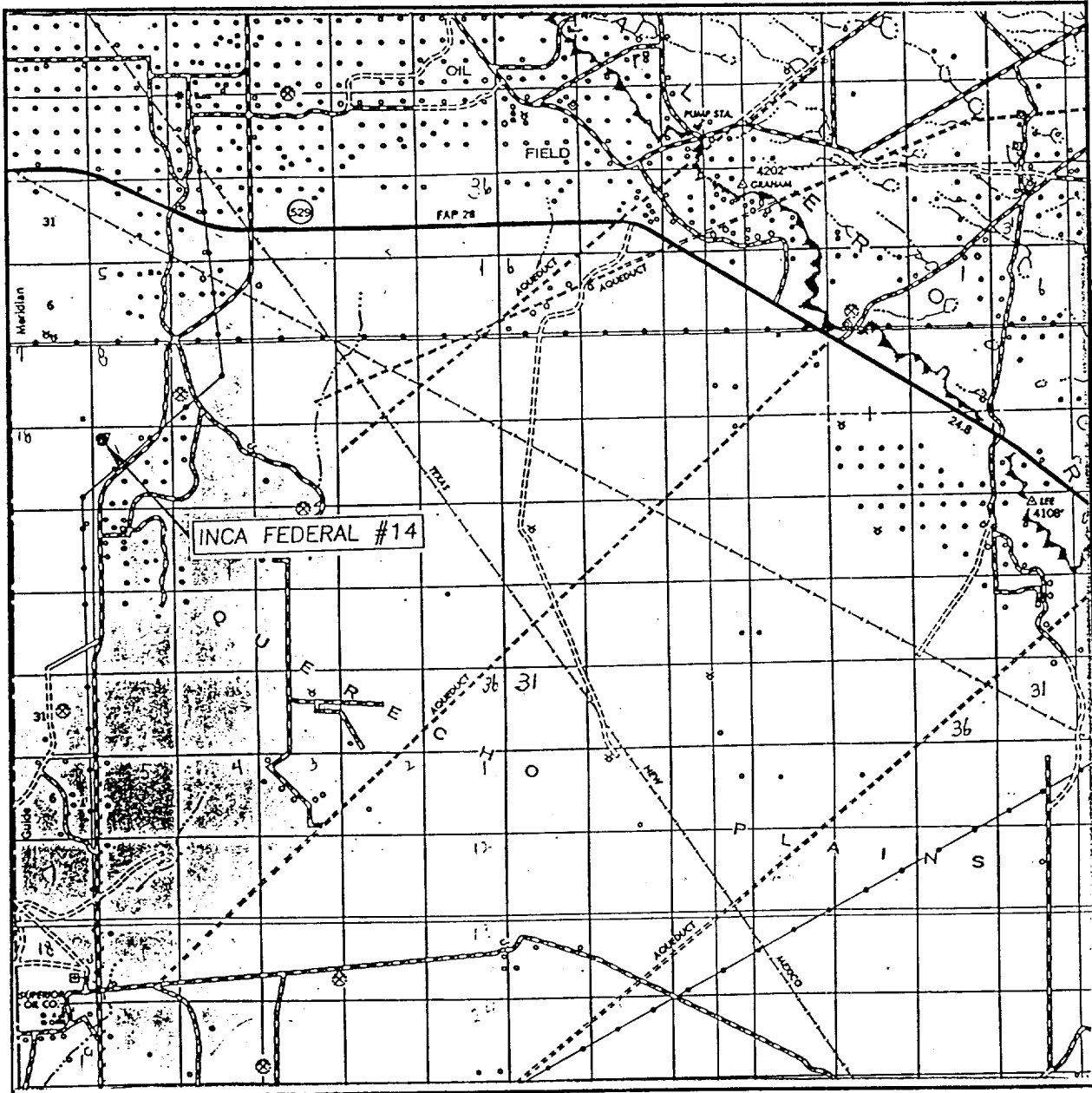
OPERATOR ST MARY LAND & EXPLORATION CO.

LEASE INCA FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
MALJAMAR, N.M.

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

VICINITY MAP



SEC. 17 TWP. 18-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 990' FNL & 330' FWL

ELEVATION 3753'

OPERATOR ST MARY LAND & EXPLORATION CO.

LEASE INCA FEDERAL

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

**Nine Point Drilling Plan
(supplement to BLM 3160-3)**

St. Mary Land and Exploration Co.
Inca Federal #14
990' FNL, 330' FWL; Sec 17, T18S, R32E
Young (Queen) Field
Lea Co., NM
NM-9016

1. The geologic surface formation is quaternary.
2. Name and estimated tops of geologic horizons

Yates	2470'
Queen	3700'

3. Protection of possible useable water will be achieved by setting 8.625" surface casing @ 1000' +/- and cementing it to surface. Based on the open hole log of Inca #9 the top of the Queen oil zone is anticipated at 3702' and bottom at 3760'. Isolation will be achieved by setting 5.5" casing @ 3900' +/-, and cementing back to surface.

4. Specifically the casing strings referenced in #3 above will consist of the following:

Surface:	8.625" OD, 24#/ft, J55, STC, new pipe @ 1000' +/- in 12.25" hole
Production:	5.50" OD, 15.5#/ft, J55, LTC, new pipe @ 3900' +/- in 7.875" hole

New "limited service" pipe suitable for our shallow conditions (if available) may be substituted for new API casing.

Cementing programs for the above casing strings are:

Surface:	615 sx Premium plus w/ 2% CaCl ₂ , mixed at 14.8 ppg, and having a yield of 1.34 cu ft/sk	WITNESS
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The above volume represents 100% excess over calculated hole volume, and will be adjusted to actual setting depth of casing. The slurries will be preceded by a fresh water spacer, and displaced with brine water.

Production:	(a) 265 sx neat Interfill "C" mixed @ 11.9 ppg and having a yield of 2.46 cu ft/sk
	(b) 135 sx Super "H" w/ 3/4% CFR-3, 5# Gilsonite and 2.5# salt mixed @ 13.2 ppg, and having a yield of 1.63 cu ft/sk

The above are Halliburton products with 25% excess volume - actual volumes will be adjusted to the open hole caliper of this wellbore. The cement slurries will be preceded by 12 bbls cement wash for mud removal and displaced with fresh water.

Equivalent products from another vendor may be substituted for Halliburton depending on price/availability.

5. The well control equipment to be employed during the drilling of this well is as illustrated on EXHIBIT A. This equipment includes a pipe and blind rams and a choke manifold of comparable pressure rating. Equipment will be rated for a minimum of 2000 psi, and will be tested to 80% of that pressure rating prior to drilling out the 8.625" surface casing.
6. It is anticipated that this well will be drilled to TD utilizing fluids shown below

0-1000'	FW mud	8.4-9.0 ppg	Utilize native solids to maintain sufficient viscosity to clean hole. Mix paper as required to control seepage loss.
1000-3650'	Brine	9.9-10.0 ppg	Circulate thru reserve pit for gravitational solids removal. Add paper as required to control seepage loss.
3650-3900'	Salt gel	10-10.1 ppg	Confine circulation to steel pits. Maintain water loss @ 12 cc +/-.
7. Auxiliary equipment will include an upper kelly cock valve, safety valve to fit drill pipe and pressure gauges.
8. No mud logging, drill stem testing or coring is planned for this wellbore. An open hole "Platform Express" (porosity, resistivity) log is planned to be run from TD - 2900'. During completion a GR/CBL/CCL will be run from PBD to 1000 to evaluate cement quality.
9. The expected BHP at TD is not expected to exceed 1500 psi, and a BHT of 95 F is anticipated. There is no H₂S present in the hydrocarbons being produced from the other wells that the company operates in this section. Should such unexpected circumstances be encountered the operator and drilling contractor are prepared to take necessary steps to ensure safety of all personnel, and environment. Lost circulation is not expected to be a serious problem in this area, and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid.

It is estimated that this well will be drilled and cased in 7-8 days. Drilling will commence as soon after approval is received and services can be contracted.

**Thirteen Point Plan for Surface Use
(additional data for form 3160-3)**

St. Mary Land and Exploration Co.
Inca Federal #14
990' FNL, 330' FWL; Sec 17, T18S, R32E
Young (Queen) Field
Lea Co., NM
NM-9016

1. **EXISTING ROADS** – A “VICINITY MAP” and a “LOCATION VERIFICATION MAP” by John West Surveying are attached which show the location of existing roads and the area topography.

The road log to the location is as follows:
 - a) Entrance to the lease is from County Road 126 – 2.5 miles south of the junction of 126 & US 529.
 - b) Proceed west through cattleguard for .6 miles.
 - c) Turn south for .2 miles to Inca Federal #7 well and battery.
 - d) From the NW corner of this pad follow the old road west .1 miles to Inca Federal #9 dry hole marker.
 - e) Follow the flags for proposed road west and south to proposed wellsite.
2. **PLANNED ACCESS ROADS** – Approximately 895' of new access road will be built from the Inca Federal #9 (dry hole) location to the proposed pad for Inca #13. The existing road from the Inca #7 battery to the #9 location will be improved by topping with additional caliche.
3. **LOCATION OF EXISTING WELLS** – EXHIBIT B shows the location of other wells within a mile radius of the proposed location. All are completed as producers except those indicated by a dry hole symbol.
4. **LOCATION OF EXISTING OR PROPOSED FACILITIES** – Upon completion as a producer, a flow line will be laid to existing facilities at the Inca Federal #7 pad where appropriate separation and measurement equipment exist. The line will parallel the road to the battery.
5. **LOCATION AND TYPE OF WATER SUPPLY** - All water (fresh or otherwise) needed for the drilling and completion of this well will be purchased from a commercial source and trucked to the location via the existing and proposed access road. No water source wells will be drilled, and no surface water will be utilized.
6. **SOURCE OF CONSTRUCTION MATERIALS** - Construction material (caliche) required for the preparation of the drill site is available from a local source. Transportation will be over the existing and proposed roads.
7. **METHODS FOR HANDLING WASTE DISPOSAL** -
 - Drill cuttings will be disposed into drilling pits after fluids have evaporated .

- The drilling pits will be lined with a biodegradable plastic liner, and buried as per regulatory requirements.
 - Receptacles for solid wastes (paper, plastic, etc) will be provided and equipped to prevent scattering by wind, animals, etc. This waste will be hauled to an approved landfill site.
 - Any other waste generated by the drilling, completion, testing of this well will be removed from the site within 30 days of the completion of drilling or testing operations.
 - A Porta-John will be provided for the crews. This will be properly maintained during the drilling operations and removed upon completion of the well.
8. ANCILLARY FACILITIES - The drilling, completion, and/or testing of this well will require no ancillary facilities.
9. WELLSITE LAYOUT - Attached EXHIBIT C shows the anticipated orientation of the drilling rig and the pad. A similar rig may have to be substituted for United Drilling Rig #4 depending on timing. Material moved to create the drilling pits will be utilized in the dike around the pits so as to facilitate restoration of the area when operations are completed.
10. PLANS FOR SURFACE RESTORATION - Reclamation of the surface location will be in accordance with the requirements set forth by the BLM. As stated earlier all waste generated by this operation will be disposed of in an approved manner, and the site restored as closely as possible to its pre-operation appearance. Due to the topography of the area no problems are anticipated in achieving this status and no erosion or other detrimental effects are expected as a result of this operation.
11. OTHER INFORMATION - The surface ownership of the drill site and the access routes are under the control/ownership of:
- Bureau of Land Management
P.O. Box 1778
Carlsbad, New Mexico 88221-1778
505-234-5972
- The BLM representative for this area is Barry Hunt who can be reached at the above number, or 505-369-4046.
- The site was archaeologically surveyed by Archaeological Survey Consultants and they will be submitting a report directly to the BLM.
12. OPERATORS REPRESENTATIVE - St. Mary Land and Exploration is covered by Nationwide Bond No. 6041872. Nance Petroleum Corporation is a wholly owned subsidiary of St. Mary represented by:

Robert L. Nance, President
 Gary L. Evertz, Operations Manager
 Herb Thackeray, Operations Engineer
 550 North 31st Street, Suite 500
 P.O. Box 7168
 Billings, MT 59103
 406-255-8627 (o)
 406-861-7372 (m)
 406-656-7250 (h)

Jackie Herron, Contract Pumper
 Hagerman, NM
 505-746-7601 (m)
 505-752-2701 (h)


13. OPERATORS CERTIFICATION

I hereby certify that I, Herb Thackeray-Operations Engineer, have inspected the proposed drill site and access route and that I am familiar with the conditions that currently exist; that the statements made in the APD package are to the best of my knowledge true and correct; and that the work associated with operations herein will be performed by ST. MARY L&E/NANCE PETROLEUM CORP and it's contractors and subcontractors in conformity with the terms and conditions of this APD package. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application with bond coverage being provided under a BLM nationwide bond.

This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Name and title: Herb Thackeray, Operations Engineer for Nance Petroleum Corp.
 A wholly owned subsidiary of St. Mary Land & Exploration Co.

Signature:

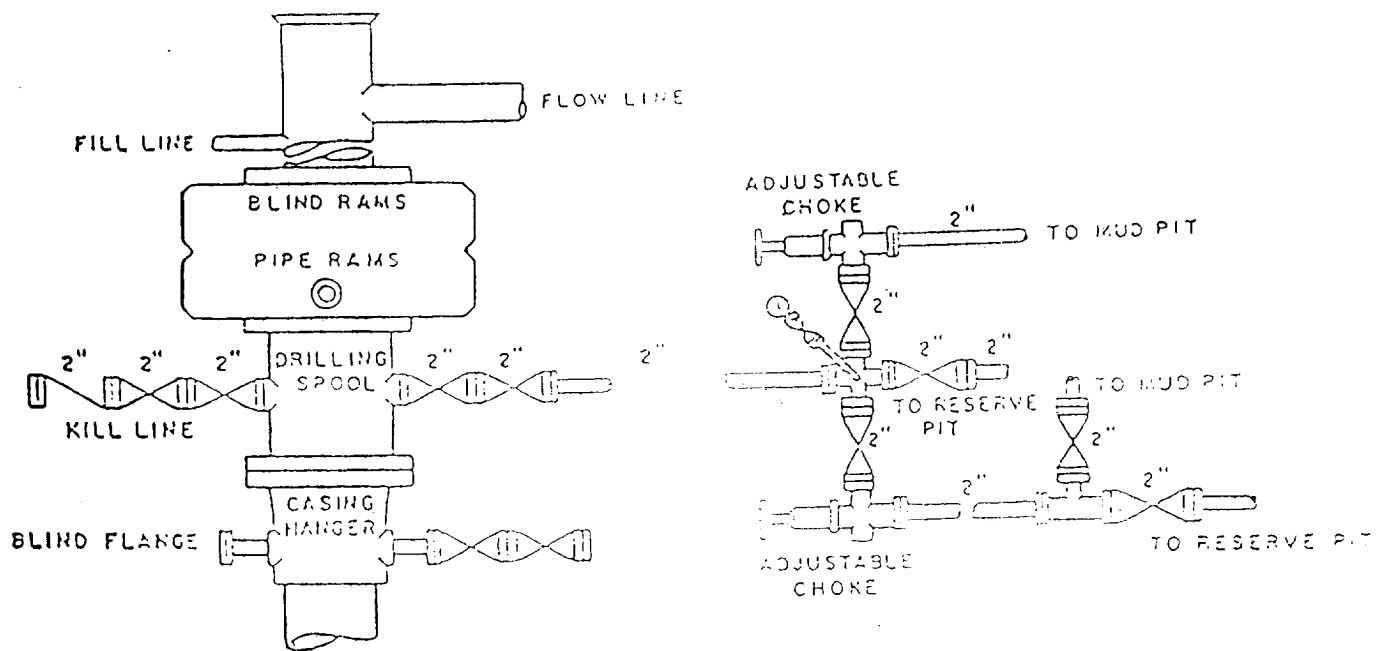


Date:

7/17/01

INCA FEDERAL #14

EXHIBIT A



8" Manual Double Ram BOP

2000# working Pressure
Rams Operated Daily

NANCE PETR.
INCA FED. #14
QUEEN LOCATION

INCA FEDERAL #14

EXHIBIT B

RLB 6/13/01

NANCE PETR.
INCA FED. #14
QUEEN LOCATION

INCA FEDERAL #14

EXHIBIT B

RLB 6/13/01

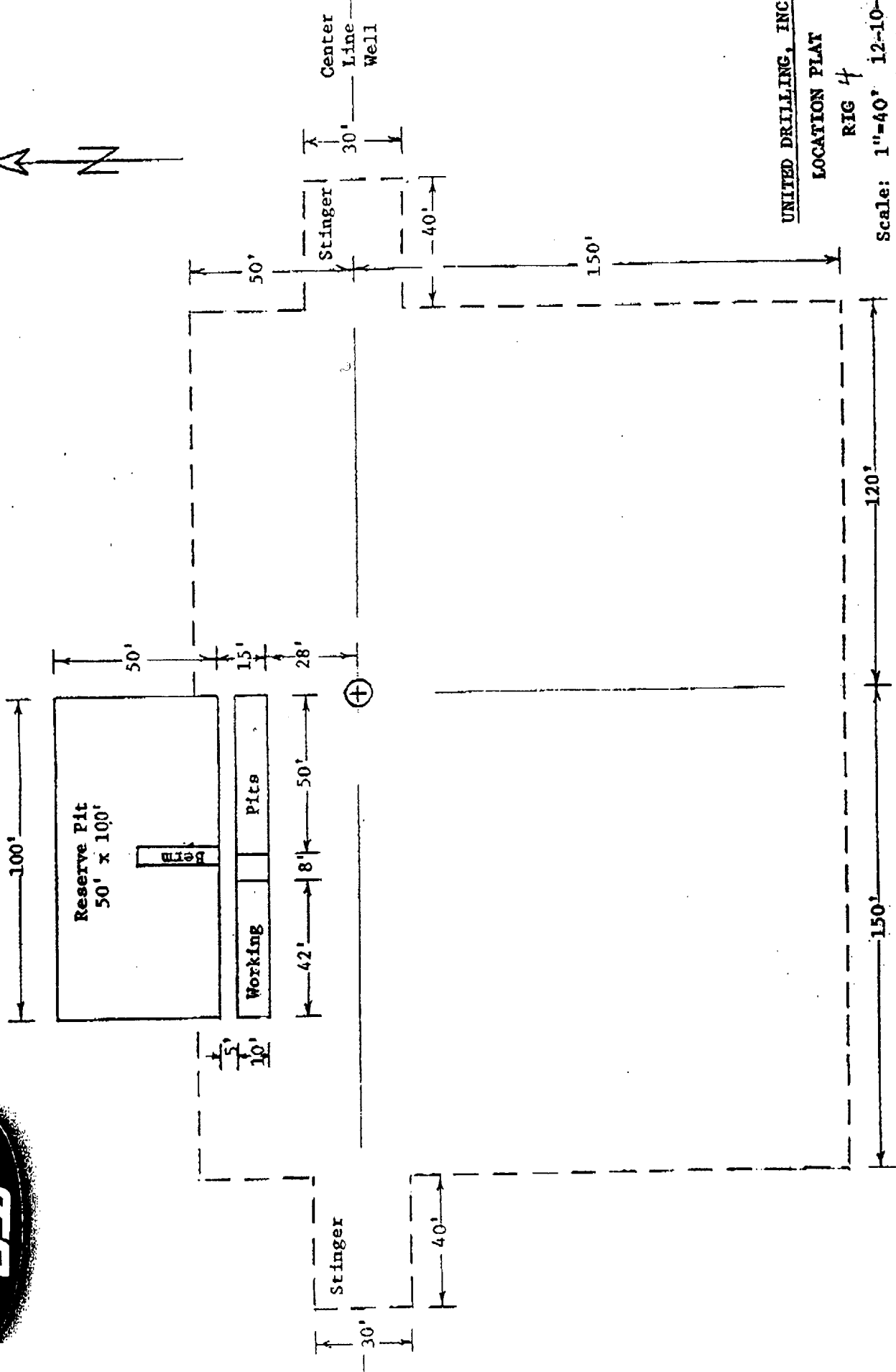
ELF 2/1/02
ABOVE DATE DOES NOT
INDICATE WHEN
CONFIDENTIAL LOGS
WILL BE RELEASED

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FEB 1 1992

EXHIBIT C



Center
Line
Well



UNITED DRILLING, INC.
LOCATION PLAT

RIG #

Scale: 1"=40' 12-10-92

ELF 2/1/02
ABOVE DATE DOES NOT
INDICATE WHEN
CONFIDENTIAL LOGS
WILL BE RELEASED

RECEIVED
JAN 31 2002