

Well number has changed from Amoco A 1-T
shown on Notice of Staking to Amoco A 2

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

5. Lease Serial No.
NMNM-024158

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit or CA Agreement, Name and No.
N/A

8. Lease Name and Well No.
AMOCO #2

9. API Well No.
30-045- 30643

10. Field and Pool, or Exploratory
BASIN FRUITLAND COAL GAS

11. Sec., T. R. M. or Blk. and Survey or Area
D 21-30N-12W NMPM

12. County or Parish
SAN JUAN

13. State
NM

1a. Type of work: ☒ DRILL

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

2. Name of Operator
POGO PRODUCNG (SAN JUAN) COMPANY

3a. Address P. O. BOX 10340
MIDLAND, TX 79702-7340

3b. Phone No. (include area code)
(432) 685-8143

4. Location of Well (Report location clearly and in accordance with any State requirements.)*
At surface 685 FNL & 1223 FWL
At proposed prod. zone SAME

14. Distance in miles and direction from nearest town or post office*
1 AIR MILE NW OF FLORA VISTA POST OFFICE

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 845'

16. No. of acres in lease
1,401.009

17. Spacing Unit dedicated to this well
N2 320 AC

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 3,222'

19. Proposed Depth
2,200'

20. BLM/BIA Bond No. on file
BLM NM2125

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
5,670' GL

22. Approximate date work will start*
09/01/2005

23. Estimated duration
2 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)

Date

BRIAN WOOD

06/27/2005

Title

CONSULTANT

PHONE: (505) 466-8120

FAX: (505) 466-9682

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office

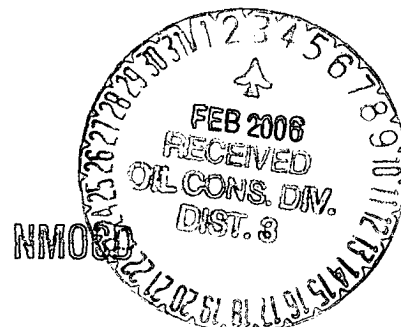
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to
conduct operations thereon.
Conditions of approval, if any, are attached.

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)

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".



State of New Mexico
Energy, Minerals & Mining Resources Department

Form C - 102

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

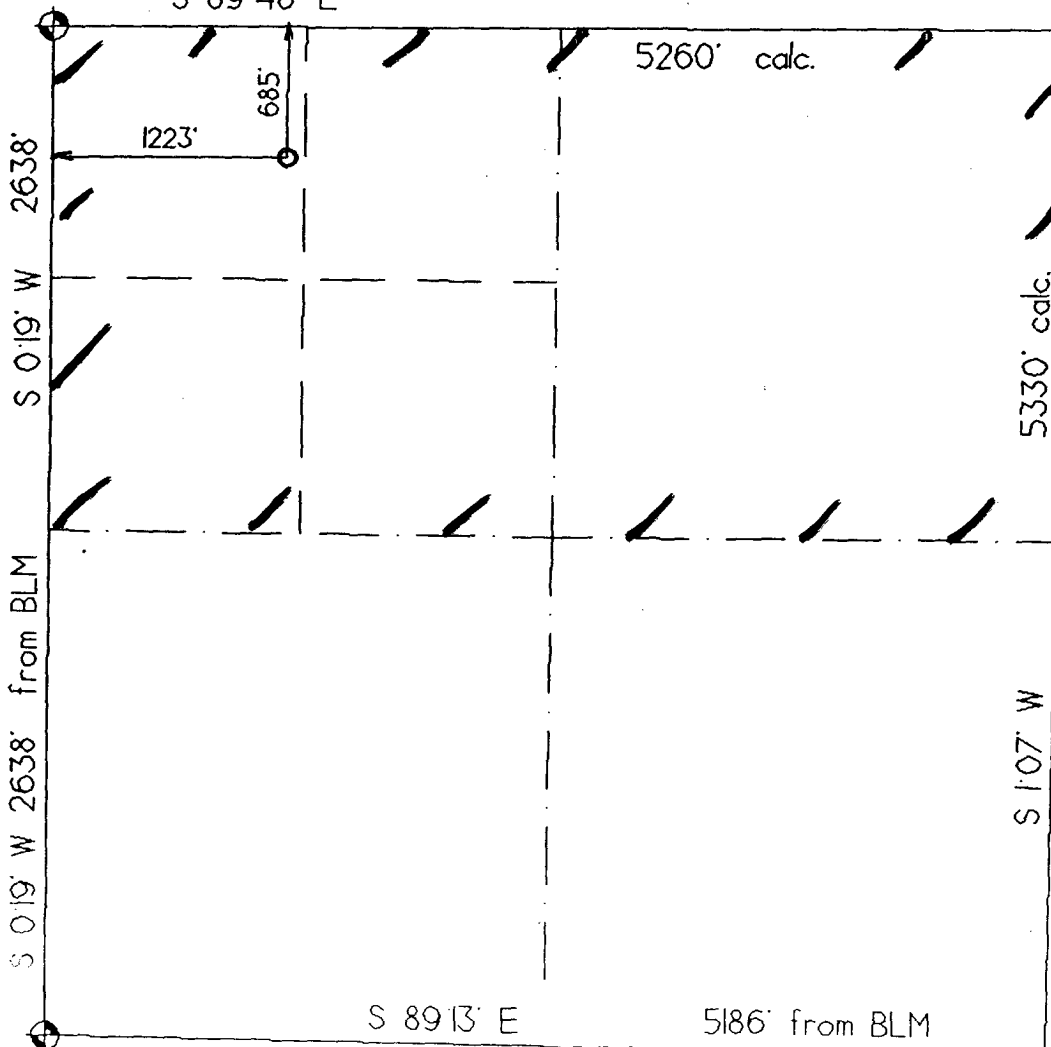
WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number 30-045-36643	Pool Code 71629	Pool Name BASIN FRUITLAND COAL
Property Code 301351	Property Name AMOCO	Well Number 2
OGRID No. 233194	Operator Name POGO PRODUCING (SAN JUAN) CO.	Elevation 5670'

Surface Location									
UL or Lot D	Sec. 21	Twp. 30 N.	Rge. 12 W.	Lot Ldn.	Feet from 685	North/South NORTH	Feet from 1223	East/West WEST	County SAN JUAN

Bottom Hole Location if Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot Ldn.	Feet from	North/South	Feet from	East/West	County
Dedication 320	Joint ? C	Consolidation	Order No.						

NO ALLOWABLE WILL 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 that the information contained herein is true and complete to the best of my knowledge and belief.	
Signature	<i>Brian Wood</i>
Printed Name	BRIAN WOOD
Title	CONSULTANT
Date	JUNE 27, 2005
SURVEYOR CERTIFICATION	
I hereby certify that the well location 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	13 March 2001
Signature and Seal of Professional Surveyor	

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.	30-045-30043
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No. NMNM-024158	
7. Lease Name or Unit Agreement Name AMOCO A	
8. Well Number 2	
9. OGRID Number 233194	
10. Pool name or Wildcat BASIN FRUITLAND COAL	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH
PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator POGO PRODUCING (SAN JUAN) COMPANY

3. Address of Operator P.O. BOX 10340, MIDLAND, TX 79702-7340

4. Well Location

Unit Letter D : 685 feet from the NORTH line and 1223 feet from the WEST line
Section 21 Township 30N Range 12W NMPM County SAN JUAN

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5,810' GL

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type DRILLING Depth to Groundwater >100' Distance from nearest fresh water well >2,500' Distance from nearest surface water ~500'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume _____ bbls Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: DRILLING PIT ☒

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed & closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Brian Wood TITLE CONSULTANT DATE 6-27-05

Type or print name BRIAN WOOD

E-mail address: brian@permitswest.com

Telephone No. (505)

466-8120

For State Use Only

APPROVED BY: [Signature]

TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. IV

DATE

FEB 03 2006

Conditions of Approval (if any):

Pogo Producing (San Juan) Company
Amoco A 2
685' FNL & 1223' FWL
Sec. 21, T. 30 N., R. 12 W.
San Juan County, New Mexico

PAGE 1

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Ojo Alamo Sandstone	0'	5'	+5,670'
Fruitland Coal	1,495'	1,500'	+4,175'
Pictured Cliffs Sandstone	1,840'	1,845'	+3,830'
Lewis Shale	2,020'	2,025'	+3,650'
Total Depth (TD)	2,200'	2,205'	+3,470'

2. NOTABLE ZONES

<u>Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
Fruitland	Ojo Alamo	Fruitland
Pictured Cliffs	Fruitland	

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) Double ram or annular 2,000 psi system with a rotating head will be used. All ram preventers and related equipment will be hydraulically tested at nipple up and after any use under pressure to 1,000 psi.

Pogo Producing (San Juan) Company
Amoco A 2
685' FNL & 1223' FWL
Sec. 21, T. 30 N., R. 12 W.
San Juan County, New Mexico

PAGE 2

Blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2,000 psi. Maximum expected pressure is ~~585~~ ⁸⁸⁰ psi.

4. CASING & CEMENT

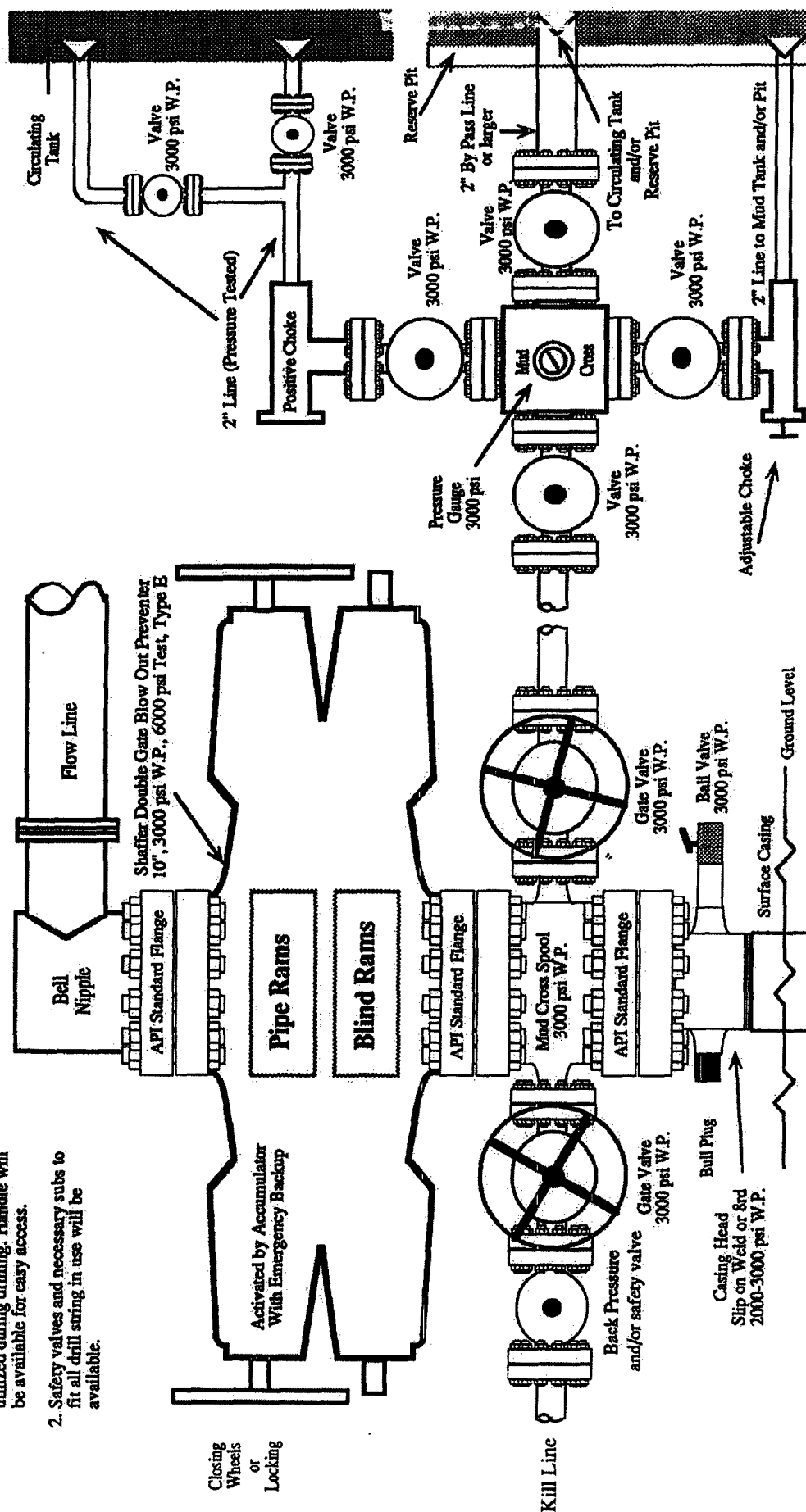
<u>Hole Size</u>	<u>O. D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>GL Setting Depth</u>
8-3/4"	7"	20	K-55	New	100' 520'
6-1/4"	4-1/2"	10.5	K-55	New	2,200' <u>2165K</u>

Surface casing will be cemented to surface with ~~256~~ ²⁵⁶ cubic feet (~~30~~ ^{2165K} sacks) Class B + 2% CaCl₂. Volume is based on 100% excess, yield of 1.18 cubic feet per sack, and slurry weight of 15.6 pounds per gallon. W. O. C. = 12 hours. Pressure test surface casing to \approx 600 psi for 30 minutes.

Production casing hole will be cleaned of rock chips by circulating \geq 150% of hole volume with mud. Forty barrels of fresh water will next be circulated. Lead with \approx 393 cubic feet (\approx 191 sacks) of Class B with 2% metasilicate (yield = 2.06 cubic feet per sack, slurry weight = 12.5 pounds per gallon). Tail with \approx 59 cubic feet (\approx 50 sacks) of Class B with 2% CaCl₂ (yield = 1.18 cubic feet per sack, slurry weight = 15.6 pounds per gallon). Total cement volume = 452 cubic feet @ 100% excess and circulating to surface.

Production casing will have 4-1/2" cement guide shoe and self fill float collar. Float will be placed one joint above the shoe. Six or seven centralizers will be spaced on every other joint starting above the shoe. Six or seven turbolizers will be placed on every other joint starting from the top of the well.

2. Safety valves and necessary subs to fit all drill string in use will be available.



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.

Pogo Producing (San Juan) Company
Amoco A 2
685' FNL & 1223' FWL
Sec. 21, T. 30 N., R. 12 W.
San Juan County, New Mexico

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5. MUD PROGRAM

Surface casing hole will be drilled with fresh water. Production casing hole will be drilled with a fresh water polymer mud. Weighting material will be drill solids or, if needed, barite. Maximum expected mud weight will be 8.5 pounds per gallon.

6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned.

Spectral Density/Dual Spaced Neutron and Dual Induction/Guard with GR, SP, and Caliper and logs will be run from TD to at least the base of the surface casing.

7. DOWN HOLE CONDITIONS

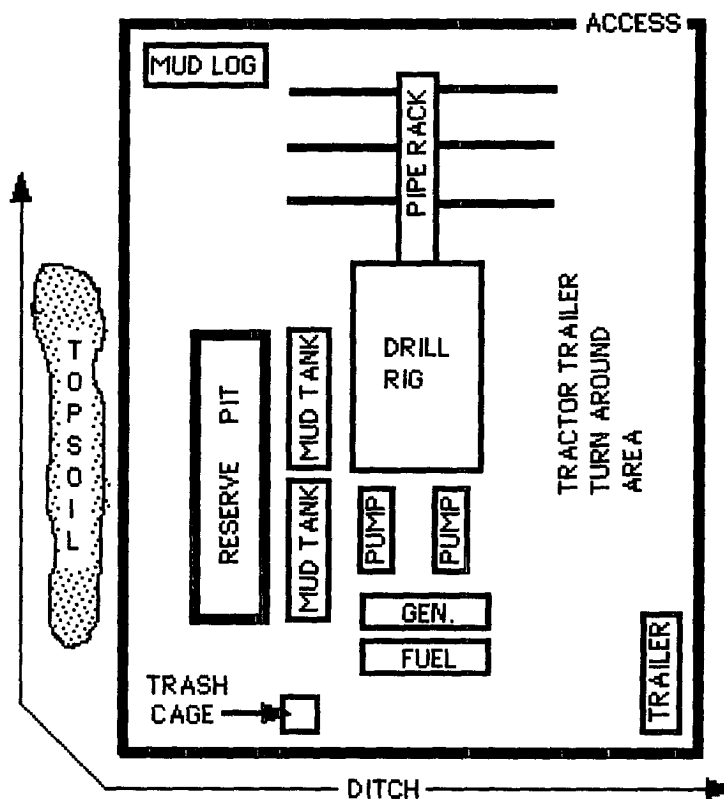
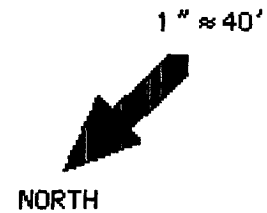
No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be ≈ 880 psi.

8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take one week to drill the well and one week to complete the well. Drilling will be daylight only.

Pogo Producing (San Juan) Company
Amoco A 2
685' FNL & 1223' FWL
Sec. 21, T. 30 N., R. 12 W.
San Juan County, New Mexico

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AMOCO A 2
well pad & section



0' 40'
Scale 1" = 40'

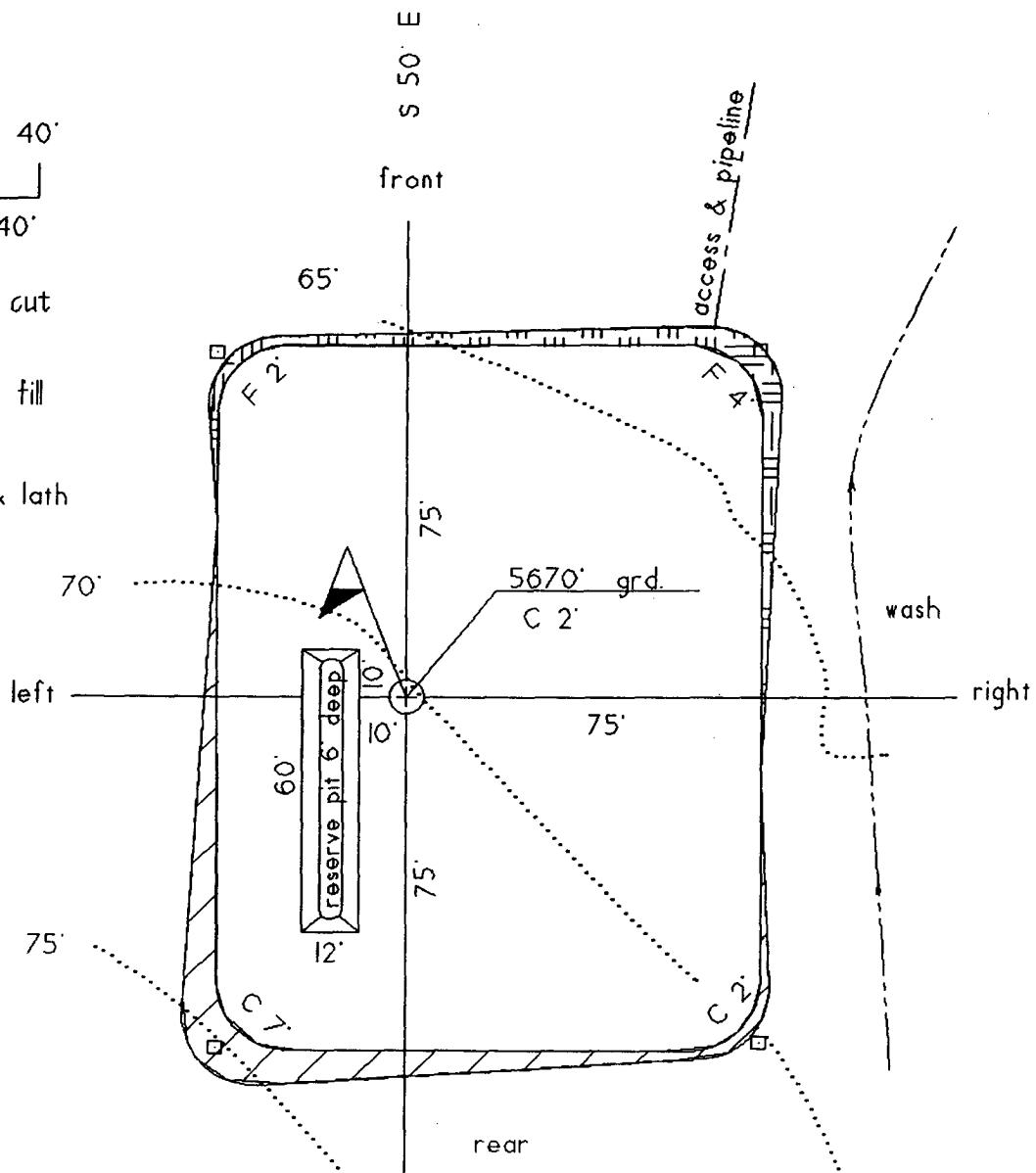


cut



fill

□ set stake & lath



section