N. M. OIL CONS. COMMISSION
P. O. BOX 1980
HOBBS, NEW MEXICO 88240

30-025-32190

Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

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

2. NAME OF OPERATOR
POGO PRODUCING COMPANY

3. ADDRESS OF OPERATOR
P. O. BOX 10340, MIDLAND, TEXAS 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1980' FSL AND 660' FEL OF SECTION 1
At proposed prod. zone (I)

5. LEASE DESIGNATION AND SERIAL NO.
NM-77090

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
FALCON FEDERAL

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT UNDES.
ANTELOPE RIDGE MORROW

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SEC.1, T.24 S., R.34 E.

12. COUNTY OR PARISH
LEA COUNTY

13. STATE
NEW MEXICO

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
16 MILES NORTHWEST OF JAL, NEW MEXICO

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
660'

16. NO. OF ACRES IN LEASE
1440.02

17. NO. OF ACRES ASSIGNED TO THIS WELL
320.01

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
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19. PROPOSED DEPTH
14,200'

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3417.1' GR
No Water Basin

22. APPROX. DATE WORK WILL START*
UPON APPROVAL

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54.5#	500'	SUFFICIENT TO CIRCULATE
12-1/4"	9-5/8"	43.5#	5350'	SUFFICIENT TO CIRCULATE
8-1/2"	7"	29#	12,000'	1200 SACKS - TO TIE BACK
6-1/8"	5" LINER	18#	11,700'-14,200'	375 SACKS

AFTER SETTING PRODUCTION CASING, PAY ZONE WILL BE PERFORATED AND STIMULATED AS NECESSARY.

SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA
BOP SKETCHES
SURFACE USE AND OPERATIONS PLAN

[illegible] to [illegible] and [illegible]

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 Richard L. Wright TITLE Division Operations Mgr. DATE July 26, 1993
Richard L. Wright

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (ORIG. SGD.) RICHARD L. MANUS TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

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

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
POGO PRODUCING CO.	FALCON FEDERAL	1

Unit Letter	Section	Township	Range	County
I	1	24 SOUTH	34 EAST NMPM	LEA

Actual Footage Location of Well:
1980 feet from the SOUTH line and 660 feet from the EAST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3417.1'	MORROW	UNDES. ANTELOPE RIDGE MORROW GAS	320.01 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

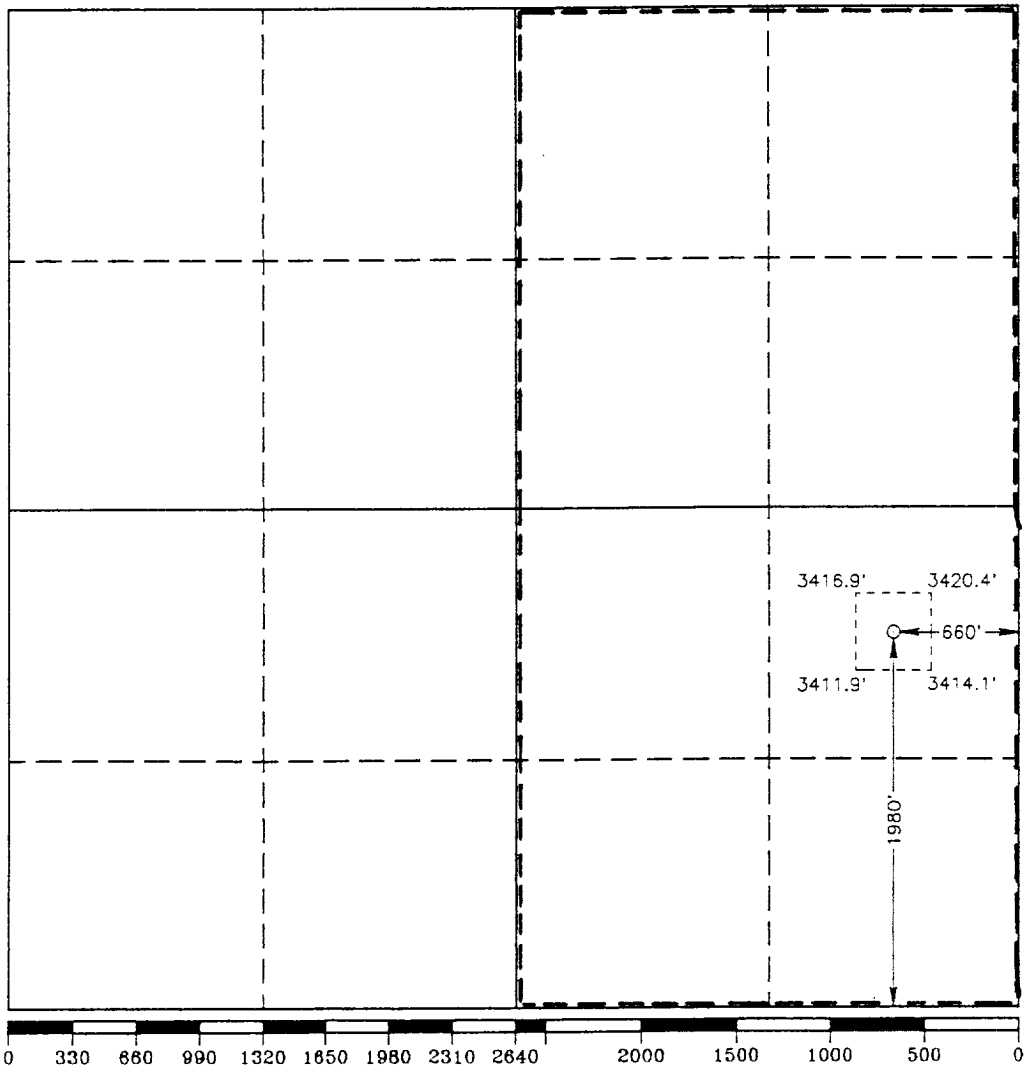
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary. _____

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, 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.

Signature: Richard L. Wright

Printed Name: Richard L. Wright

Position: Division Operations Mgr.

Company: POGO PRODUCING COMPANY

Date: July 26, 1993

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 knowledge and belief.

Date Surveyed: JULY 14, 1993

Signature & Seal of Professional Surveyor: GARY L. JONES NEW MEXICO 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239
GARY L. JONES, 7977

93-11-1357

SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY

FALCON FEDERAL WELL NO. 1

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Anhydrite	980'
Delaware	5200'
Bone Springs	8750'
Wolfcamp	11,500'
Strawn	11,750'
Atoka	11,950'
Morrow	12,900'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Atoka	Gas
Morrow	Gas

4. PROPOSED CASING AND CEMENTING PROGRAM:

CASING SIZE	SETTING DEPTH FROM	TO	WEIGHT	GRADE	JOINT
13-3/8"	0	500'	54.5#	J-55	STC
9-5/8"	0	5350'	43.5#	N-80	LTC
7"	0	6500'	29#	P-110	LTC
7"	6500'	12,000'	29#	N-80	LTC
5" LINER	11,700'	14,200'	18#	P-110	LTC

MINIMUM DESIGN FACTORS: COLLAPSE 1.1 BURST 1.1 TENSION 1.6

13-3/8" casing to be cemented with 470 sacks of light cement tailed in with 100 sacks of premium cement. Cement to circulate.

9-5/8" casing to be cemented with 2235 sacks of light cement with 5# salt per sack tailed in with 200 sacks of premium cement with 5# of salt per sack. Cement to circulate.

7" casing to be cemented in three stages with staging tools at depths of approximately 8800 and 6200 feet. First stage to be 490 sacks of premium cement. Second stage to be 200 sacks of light cement tailed in with 225 sacks of premium cement. Third stage to be 170 sacks of light cement tailed in with 115 sacks of premium cement. Cement volumes calculated for cement to tie back 1000 feet into the 9-5/8" casing to 4350 feet.

5" liner to be cemented with 375 sacks of premium cement. Cement to circulate the liner.

Cement volumes may be adjusted and cement may have lost circulation and/or other additives depending on hole conditions at the time casing is run.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling below the surface casing will be a 3000 psi working pressure stack.

The BOP stack, while drilling below the first intermediate casing will be a 5000 psi working pressure stack and manifold, and, while drilling below the the second intermediate casing, a 10,000 psi working pressure stack and manifold will be in use.

BOP sketches are attached.

6. CIRCULATING MEDIUM:

Surface to 500 feet: Fresh water gel spud mud. Weight 8.6 to 8.8. Viscosity 34 to 36 as required for hole cleaning.

500 feet to 5350 feet: Brine conditioned as necessary for control of viscosity and seepage. Weight 8.8 to 10. pH 9 to 10. Viscosity 30 to 32.

5350 feet to 12,000 feet: Brine cut with fresh water to adjust weight to control seepage or Wolfcamp pressure. Weight 8.8 to 9.0. Viscosity 28 to 29. pH 9 to 10.

12,000 feet to T.D.: Water base drilling fluid conditioned as necessary for control of viscosity, pH, and water-loss. Weight 12 to 15. Viscosity 40 to 50. pH 9 to 9.5. Filtrate 12 to 5.

7. AUXILIARY EQUIPMENT:

Geolograph from surface to total depth.

Mud logging trailer to be in use below 5350 feet.

8. TESTING, LOGGING, AND CORING PROGRAMS:

Drill stem tests will be made when data indicate a test is warranted.

It is planned that electric logs will include GR-CNL-Density logs and GR-DLL logs.

No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

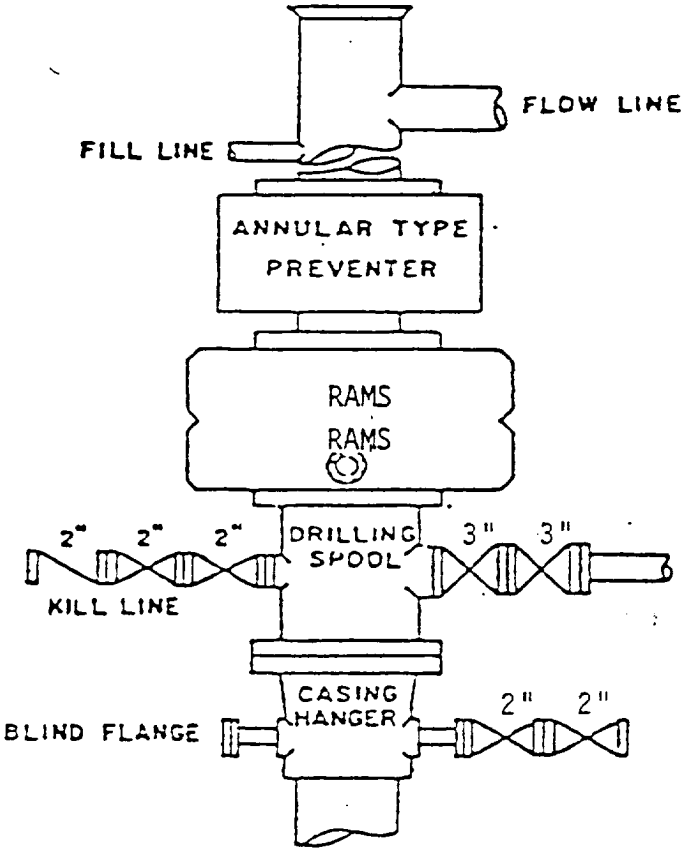
It is not expected that any hydrogen sulfide bearing zone will be penetrated while conducting the proposed drilling operations.

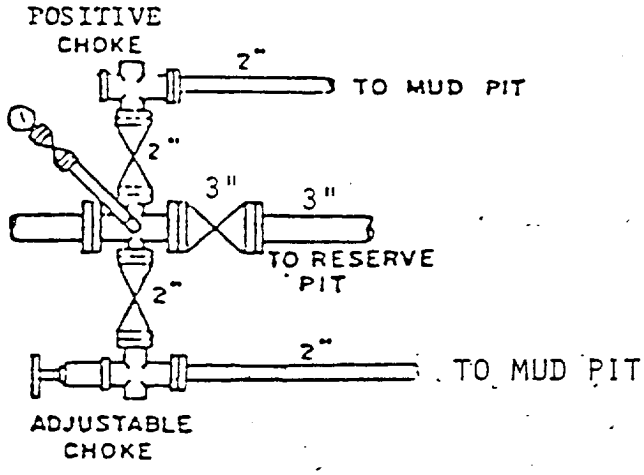
Abnormal gas pressure may be present in the Atoka. Expected bottom hole pressure is about 8800 psi.

Bottom hole temperature should be normal. Expected bottom hole temperature is about 185 degrees Fahr.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 60 days

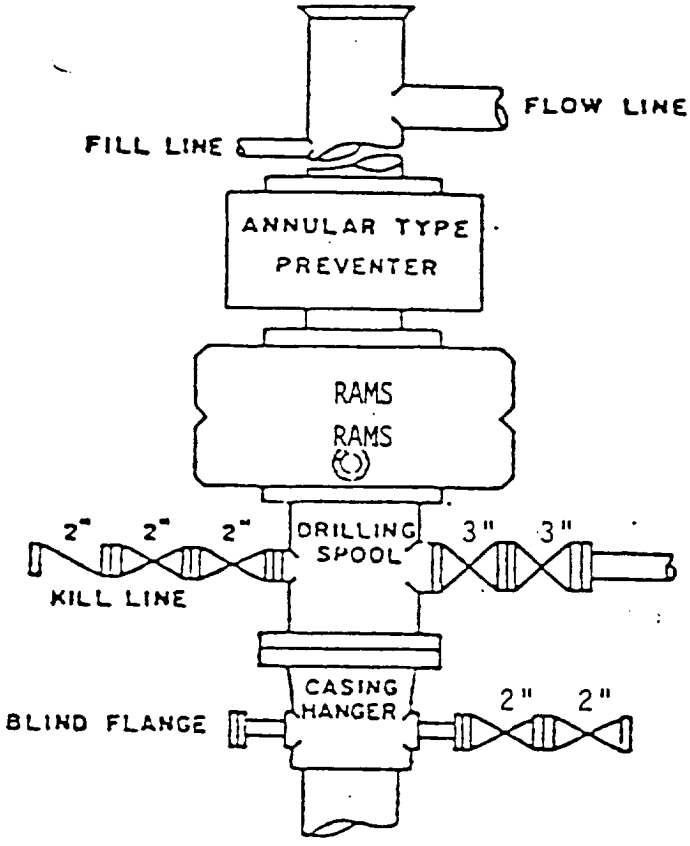


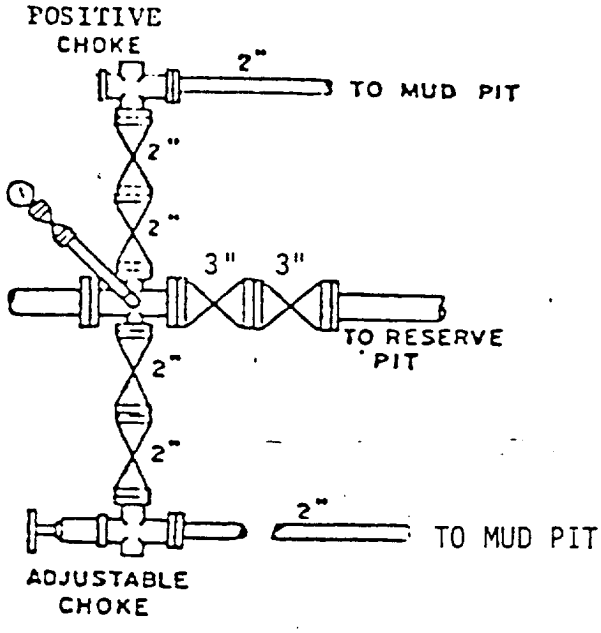


BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT



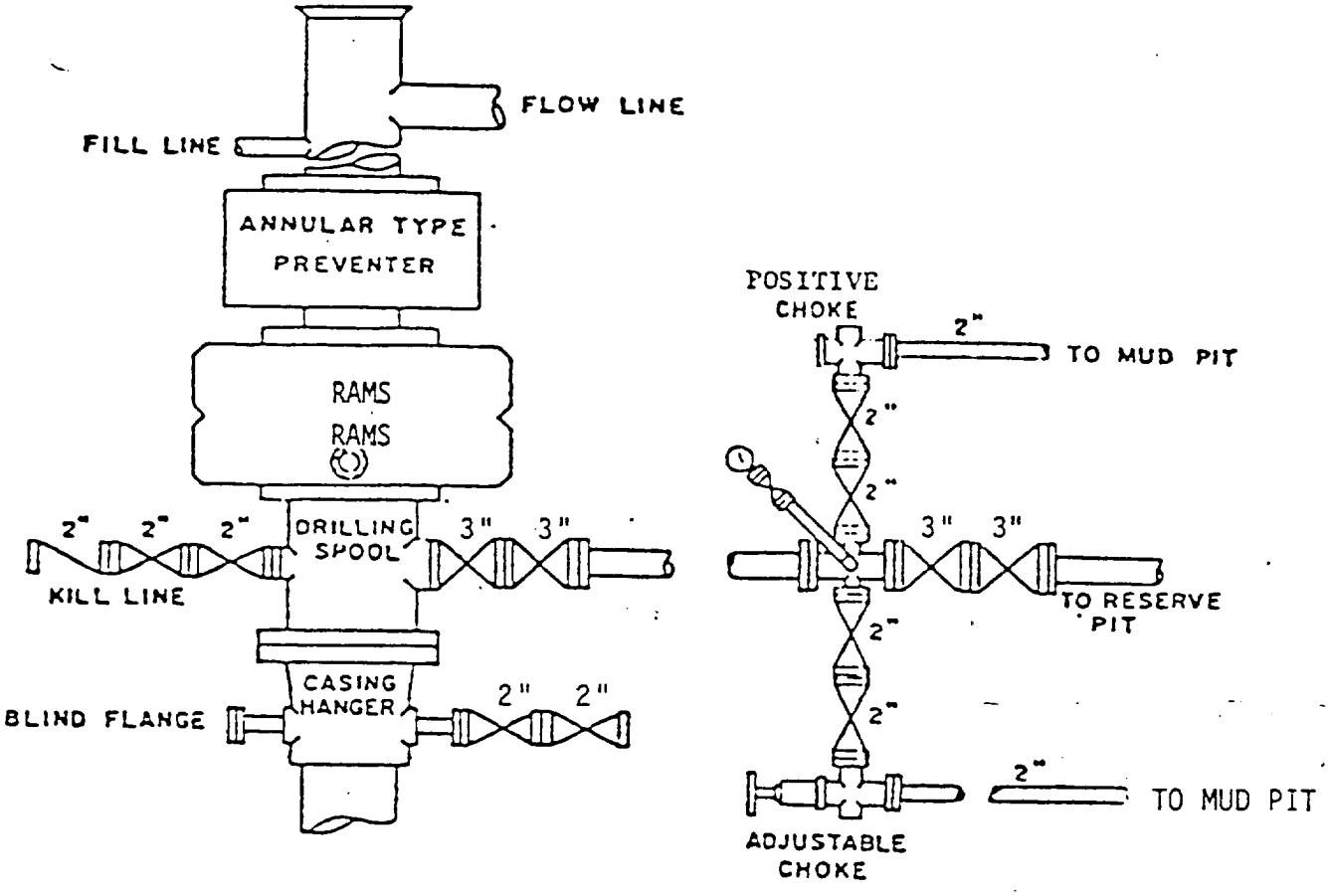


BOP STACK

5000 PSI WORKING PRESSURE

IN USE WHILE DRILLING BELOW 9-5/8" CASING SEAT

BOP ARRANGEMENT



BOP STACK

10,000 PSI WORKING PRESSURE

IN USE WHILE DRILLING
BELOW 7" CASING

BOP ARRANGEMENT