

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

5. Lease Serial No.  
NM-103604

6. If Indian, Allottee or Tribe Name

If Unit or CA/Agreement, Name and/or No.

7. Well Name and No.

GOODNIGHT "35" FEDERAL # 3

8. API Well No.  
30-015-31865

10. Field and Pool, or Exploratory Area  
CEDER CANYON-MORROW

11. County or Parish, State

EDDY CO. NEW MEXICO

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

2. Name of Operator

KUKUI OPERATING COMPANY

(LARRY STRIDER)

3a. Address 203 WEST WALL SUITE 810  
MIDLAND, TEXAS 79701

3b. Phone No. (include area code)  
915-687-6200

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

660' FWL & 440' FSL SEC. 35 T23S-R29E EDDY CO. NM

BHL 660' FSL & 660' FWL SEC. 35 T23S-R29E EDDY CO. NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other <u>Alter depth</u>
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	from <u>8500'</u> to
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>14,300'</u>

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

## R-111-P-POTASH

- Kukui Operating Company requests the approval to alter the depth of the above referenced well from 8500' to 14,300'.
- Original APD filed with BLM on 01/23/01 and approved by BLM 06/19/01.
- Attached is a revised depth, casing program, mud program, cementing program and all other related data necessary to extend the depth of this well.
- This will be a directionally drilled well to comply with the OCD spacing rules bottom hole will be 660' FWL & 660' FSL SEC 35 T23S-R29E

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

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Joe T. Janica

Title Agent

Signature

Date 07/17/01

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (ORIG. SGD.) ALEXIS C. SWOBODA

PETROLEUM ENGINEER

Date JUL 23 2001

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

RECEIVED  
2001 JUL 20 AM 9:57  
BUREAU OF LAND MGMT.  
ROSWELL OFFICE

## DISTRICT I

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

## State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## DISTRICT II

P.O. Drawer DD, Artesia, NM 88211-0719

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

P.O. BOX 2088, SANTA FE, N.M. 87504-2088

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
	74480	CEDER CANYON - MORROW
Property Code	Property Name	Well Number
	GOODNIGHT "35" FEDERAL	3
OGRID No.	Operator Name	Elevation
149678	KUKUI OPERATING COMPANY	3089'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	35	23 S	29 E		440	SOUTH	660	WEST	EDDY

## Bottom Hole Location If Different From Surface

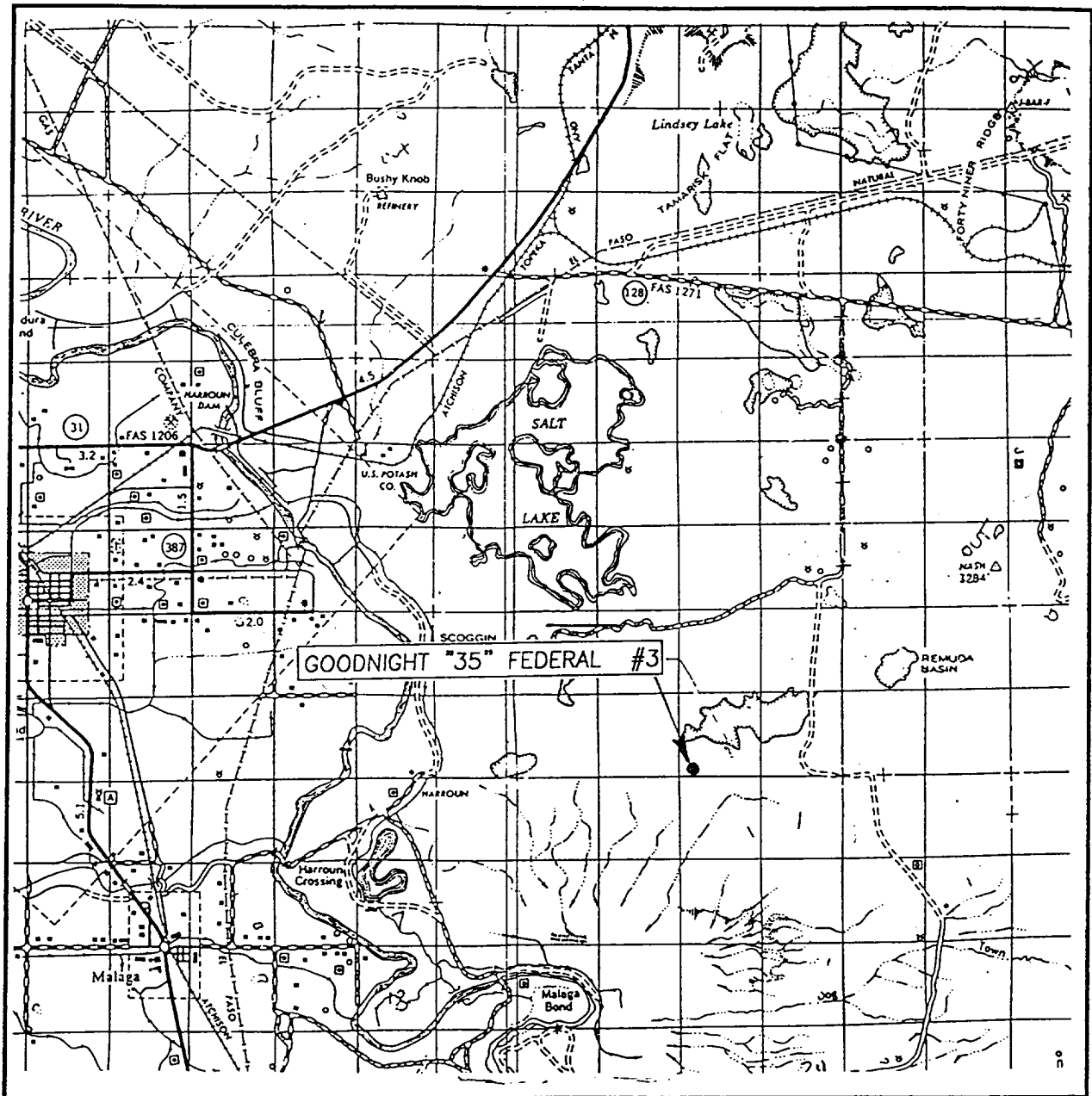
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
320									

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

	<b>OPERATOR CERTIFICATION</b> I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature Joe T. Janica Printed Name Agent Title 07/17/01 Date	
	<b>SURVEYOR CERTIFICATION</b> 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. APRIL 12, 20012 Date Surveyed Signature & Seal of Professional Surveyor  01-11-0469 Certificate No. RONALD J. EDSON 3239 GARY EDSON 12841	

EXHIBIT "A"

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 35 TWP. 23-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

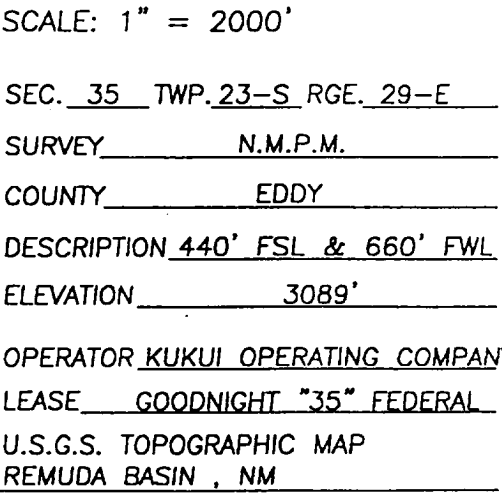
DESCRIPTION 440' FSL & 660' FWL

ELEVATION 3089'

OPERATOR KUKUI OPERATING COMPANY

LEASE GOODNIGHT "35" FEDERAL

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



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

KUKUI Operating Company  
 Goodnight '35' Federal #3 - NM-103604  
 660' FWL, 440' FSL  
 Sec. 35 - T 23S - R 29E  
 Eddy County, New Mexico  
 Proposed Total Depth: 14,300' TVD

### DRILLING PROGRAM

1.) Estimated Formation Tops:

<u>Formation</u>	<u>Est. Depth</u>
Salado Salts	600'
Lamar	3185'
Bell Canyon	3235'
Cherry Canyon (Manzanita)	4200'
Brushy Canyon	5655'
Lower Brushy Canyon Shale	6635'
Bone Spring Formation	6900'
First Bone Spring Sand	7935'
Second Bone Spring Sand	8750'
Third Bone Spring Sand	9800'
Wolfcamp	10500'
Strawn	12150'
Atoka	12400'
Morrow	13350'
Lower Morrow	13850'
Barnett	13960'

2.) Estimated Depths of Anticipated Minerals:

- Fresh Water - Surface to 350'.  
 - Operator plans to set 13 3/8" surface casing to 400' and cement to surface.
- Salt Section - 600' - 2,500'.  
 Operator plans to set 9 5/8" salt protection string to 3,100' and cement to surface.
- Hydrocarbons - Atoka and Morrow formations with depths ranging from 12,800' to 14,200'.  
 - Bone Spring and Delaware formations ranging from 4,000' to 8,200'.  
 - Operator plans to set 7" intermediate/production casing to approx. 10,550' (100' into top of Wolfcamp). Top of cement will be dictated by geology and hydrocarbons encountered from Delaware to top of Wolfcamp.

3.) Minimum Specifications for Pressure Control Equipment:

<u>Interval</u>	<u>Depths</u>	<u>Hole Size</u>	<u>BOP's</u>
Surface	0'-400'	17 1/2"	Diverter head
Salt Protection	400'-3,100'	12 1/4"	3M-13 5/8 - A
Int./Production	3,100'-10,550'	8 3/4"	5M-11 - SRRAG
Production Liner	TD - 10,150'	6 1/8"	10M-7 1/16-SRRAG

The accumulator system will have three times the volume necessary to close everything on the BOP stack. A 10M choke manifold will be utilized with minimum 3" nominal diameter inlet line and 2" nominal diameter downstream lines. Manifold, lines, and BOP's will be tested as described in Onshore Order No. 2.

4.) **Proposed Casing Program:**

<u>Interval</u>	<u>Depths</u>	<u>Hole Size</u>	<u>Casing Specified (New)</u>
Conductor	0-40'	~ 24"	20" Structural – only if required
Surface	0-400'	17 1/2"	13 3/8", 48 lbs./ft., H-40, ST&C
Salt Protection	0-3,100'	12 1/4"	9 5/8", 36 lbs./ft., K-55, ST&C
Intermediate/Production	0-10,550'	8 3/4"	7", 26 lbs./ft., P-110, LT&C
Production Liner	10,150'-14,100'	6 1/8"	4 1/2", 13.5 lbs./ft., P-110, LT&C

**WITNESS  
WITNESS**

5.) **Proposed Cementing Program:**

Surface Casing: 400' of 13 3/8" casing in 17 1/2" hole with 100% excess. Cement to be circulated to surface.

500 sacks Class C + 2% CaCl<sub>2</sub>

1.34 ft.<sup>3</sup>/sk.  
14.8 lbs./gal.  
6.36 gals./sk.

Salt Protection: 3,100' of 9 5/8" in 12 1/4" hole with 150% excess in open hole. Cement to be circulated to surface.

Lead cement - 1,000 sacks light cement + 5% salt + lost circulation material as required.

12.5 lbs./gal.  
2.03 ft.<sup>3</sup>/sk.  
11.0 gals./sk.

Tail cement - 200 sacks Class C + 1% CaCl<sub>2</sub>

14.8 lbs./gal.  
1.34 ft.<sup>3</sup>/sk.  
6.36 gals./sk.

Intermediate/Production: 10,550' of 7" in 8 3/4" hole.  
Volume calculated for 2,000' of fill (assuming no hydrocarbons above casing seat) with 100% excess.

510 sacks Class H + fluid loss additives and lost circulation material as required.

15.6 lbs./gal.  
1.18 ft.<sup>3</sup>/sk.  
5.2 gals./sk.

Note: Top of Cement will depend on geology and hydrocarbon potential evaluated during drilling operations. A 2-stage primary cement job will be performed if upper strata of interval appear productive.

Production Liner: Approximately 3,550' of 4 1/2" in 6 1/8" hole. Liner hanger set at ~ 10,150'. Cement volume calculated with 50% excess.

435 sacks Class H + dispersant + fluid loss additives + retarder/accelerator as required for acceptable thickening time tests.

15.2 lbs./gal.  
1.26 ft.<sup>3</sup>/sk.  
5.68 gals./sk.

Float shoes, float collars, and centralizers will be utilized where feasible. Casing will be reciprocated during cementing operations when possible. Fluid spacers and top wiper plugs will be utilized on each job.

6.) **Mud Program:**

Surface to 400':	Spud with gel/lime water base fluid having 34-36 sec./qt. viscosity with lost circulation material as required. Fluid viscosity may be increased to 45-50 sec./qt. in the event circulation becomes a problem. Anticipate loss of circulation.
400' to 3,100':	Brine/Native System with lime for pH control and drilling paper/fibrous material for lost circulation control. Mix salt gel system @ 10 ppg, viscosity 39-42 sec./qt., fluid loss 12-15 ml/30 min. if hole conditions warrant.
3,100' – 10,550':	Controlled Brine/Native System with pH of 9.5-10.5, mud weight of 8.8-9.2 ppg, and total solids < 1.5%. Utilize salt gel sweeps for hole cleaning.
10,550' – 14,100':	Drill out below 7" casing with 10 ppg brine with pH 9.5-10.5. Prior to top of Strawn formation mix Duo-Vis/Polypac or equivalent system with 36-38 sec./qt., 6-10 ml./30 min. or less fluid loss, and barite as required for weighting mud system. Mud weights and viscosity will be adjusted as dictated by hole conditions. A 12.0-12.5 ppg system may be required for pressure control.

Adequate amounts of LCM and barite will be on location to control circulation and maintain bottom hole pressures. Minimum kick detection equipment will include a mud return indicator (flow line sensor) and pit volume totalizer (PVT).

7.) **Anticipated Testing, Coring, and Logging:**

Mud Logger - On site @ 2,950' (above Lamar)

Potential DST Zones – Wolfcamp, Atoka, Morrow

Logging Program:

	<u>Log Suite</u>	<u>Intervals</u>
Run #1	AIT-GR CNL-LDT-GR  Rotary Sidewall Cores	Base Delaware – Base Short Intermediate Casing Base Delaware – Base Short Intermediate Casing (GR – Neutron to Surface) Selected Intervals in the Bell & Cherry Canyon Section
Run #2	DLL-MSFL-GR CNL-LDT-GR	Top Wolfcamp – Base Delaware Top Wolfcamp – Base Delaware
Run #3	DLL-MSFL-GR CNL-LDT-GR	TD – Top Wolfcamp TD – Top Wolfcamp

8.) **ANTICIPATED BOTTOM HOLE PRESSURE:**

The Wolfcamp formation (10,500' – 12,150') and Atoka formation (12,400' – 13,350') may be over pressured. Bottom hole pressures in the 8,000 psi – 8,500 psi range may exist.

9.) **Operations:**

An approved drilling permit for an 8,500' Bone Spring test was granted on June 19, 2001. KUKUI is respectfully submitting a revised well plan to deepen this well to test the Morrow formation. The anticipated spud date is mid August, 2001. Estimated drilling time is approximately 50 days.

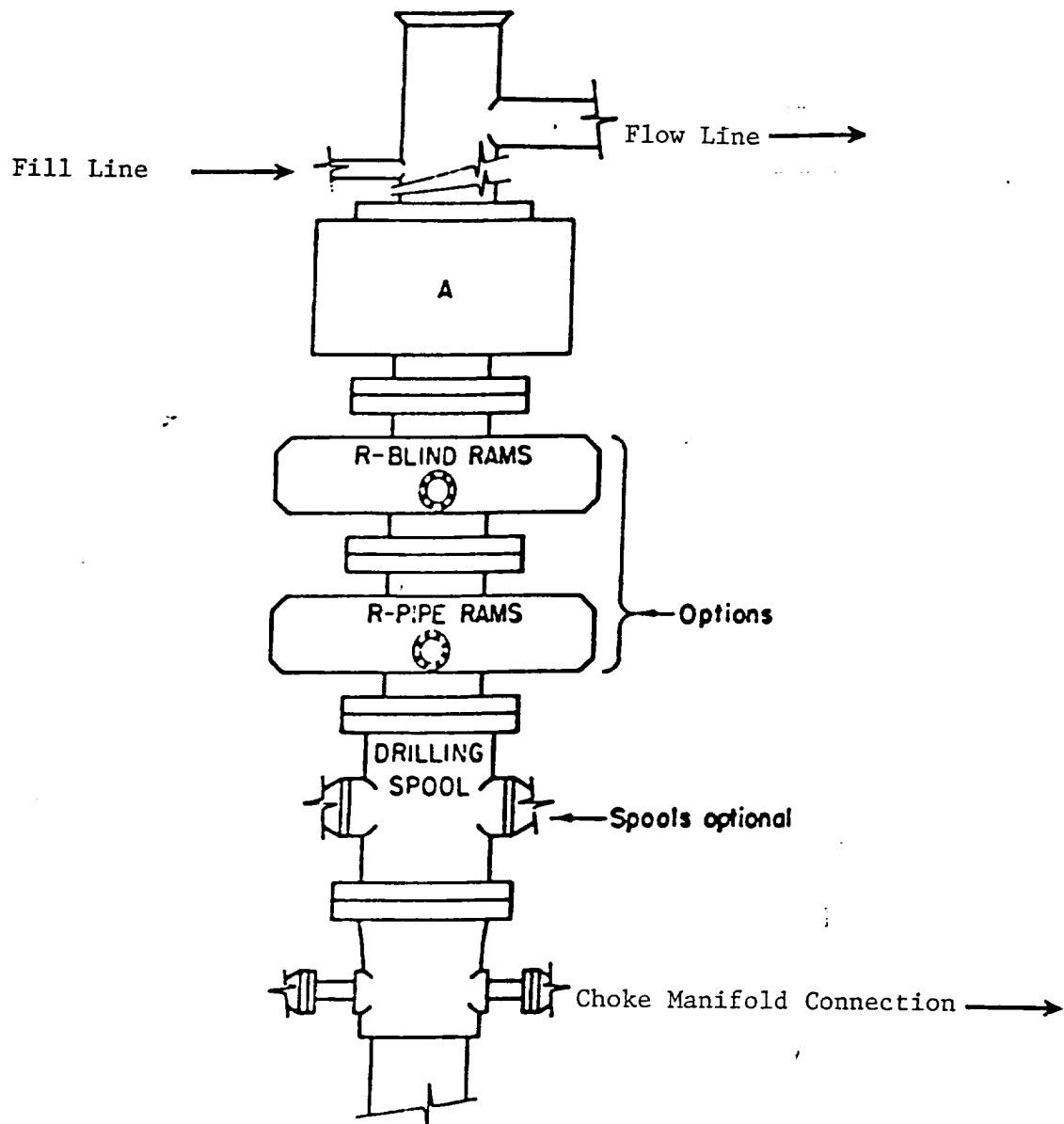
The Goodnight '35' Federal #1 well is in the Potash Mining Area. Order No. R-111-P rules and regulations will be followed in addition to all BLM and OCD requirements.

KUKUI Operating Company  
203 W. Wall St., Suite 810  
Midland, TX. 79701

Larry K. Strider  
Joe T. Janica

Western District Manager  
Tierra Exploration

915/627-6200  
505/391-8503



**ARRANGEMENT SRRA**

1500 Series  
5000 PSI WP

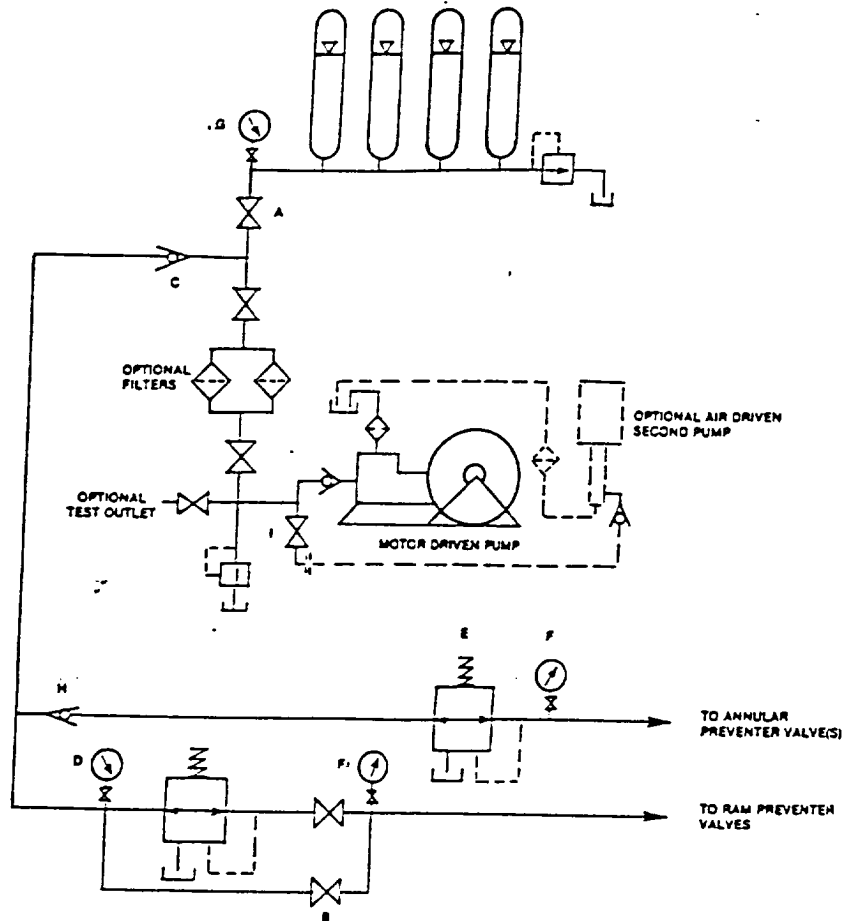


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

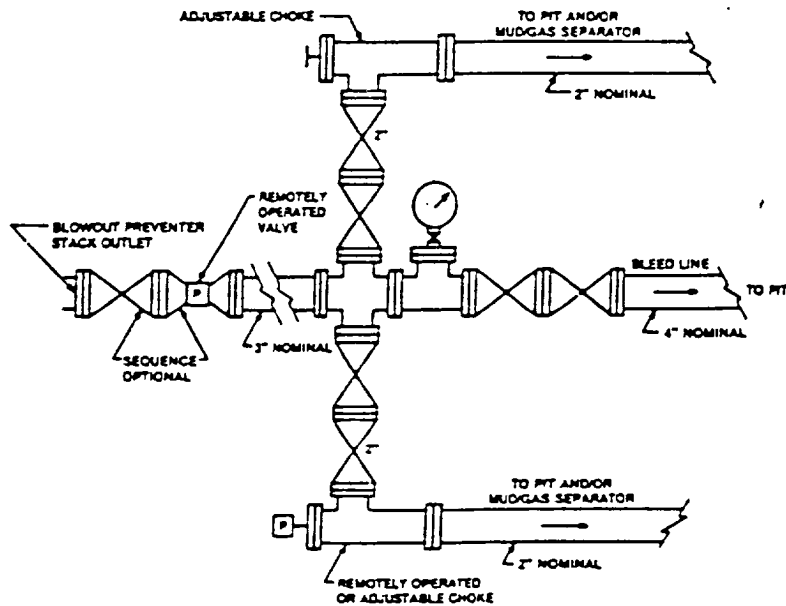


FIGURE K4-2. Typical choke manifold assembly for 5M rated working pressure service - surface installation.