4.) **Proposed Casing Program:**

Interval	Depths	Hole Size	Casing Specified (New)
Conductor	0-30'	~ 24"	20" Structural – only if required
Surface	0-575'	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	10,250'-14,100'	6 1/8"	4 1/2", 13.5 lbs./ft., P-110, LT&C

5.) **Proposed Cementing Program:**

Surface Casing: 575' of 13 3/8" casing in 17 1/2" hole with 100% excess. Cement to be circulated to surface.

625 sacks Class C + 2% $CaCl_2$

1.34 $ft.^3/sk.$
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 $ft.^3/sk.$
11.0 gals./sk.

Tail cement - 200 sacks Class C + 1% $CaCl_2$

14.8 lbs./gal.
1.34 $ft.^3/sk.$
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 $ft.^3/sk.$
5.2 gals./sk.

Note: Top of Cement will depend on geology and hydrocarbon potential evaluated during drilling operations.

Production Liner: Approximately 3,550' of 4 1/2" in 6 1/8" hole. Liner hanger set at ~ 10,250'. 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 $ft.^3/sk.$
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 575':	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.
575' 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:

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

The NOS was filed 1/13/2000. The anticipated spud date is April 1, 2000. Estimated drilling time is approximately 45 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.

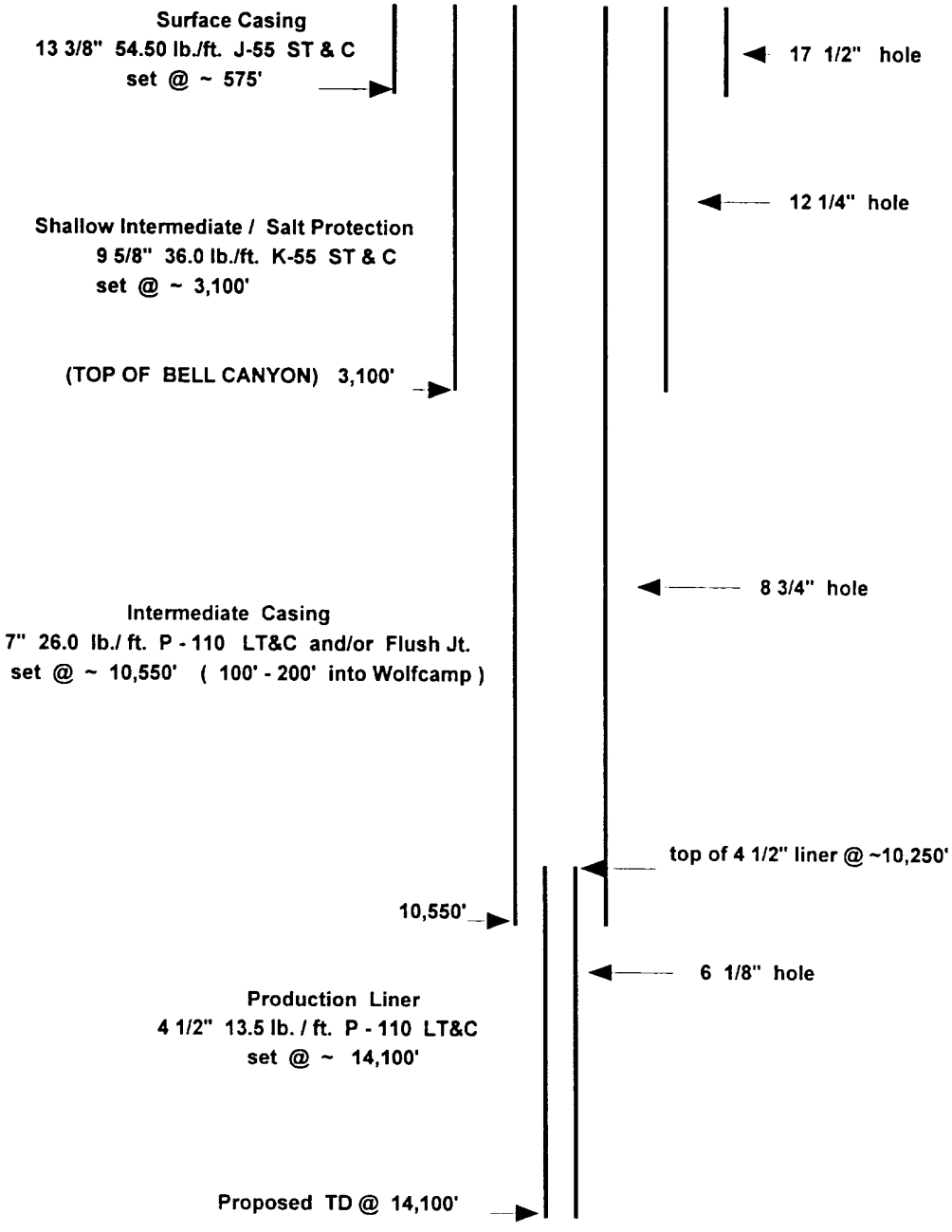
KUKUI Operating Company
601 Vestavia Parkway, Suite 240
Vestavia, AL 35216

Larry K. Strider	District Operations Manager	205/823-2977
E. Scott Kimbrough	Consultant	915/682-2500

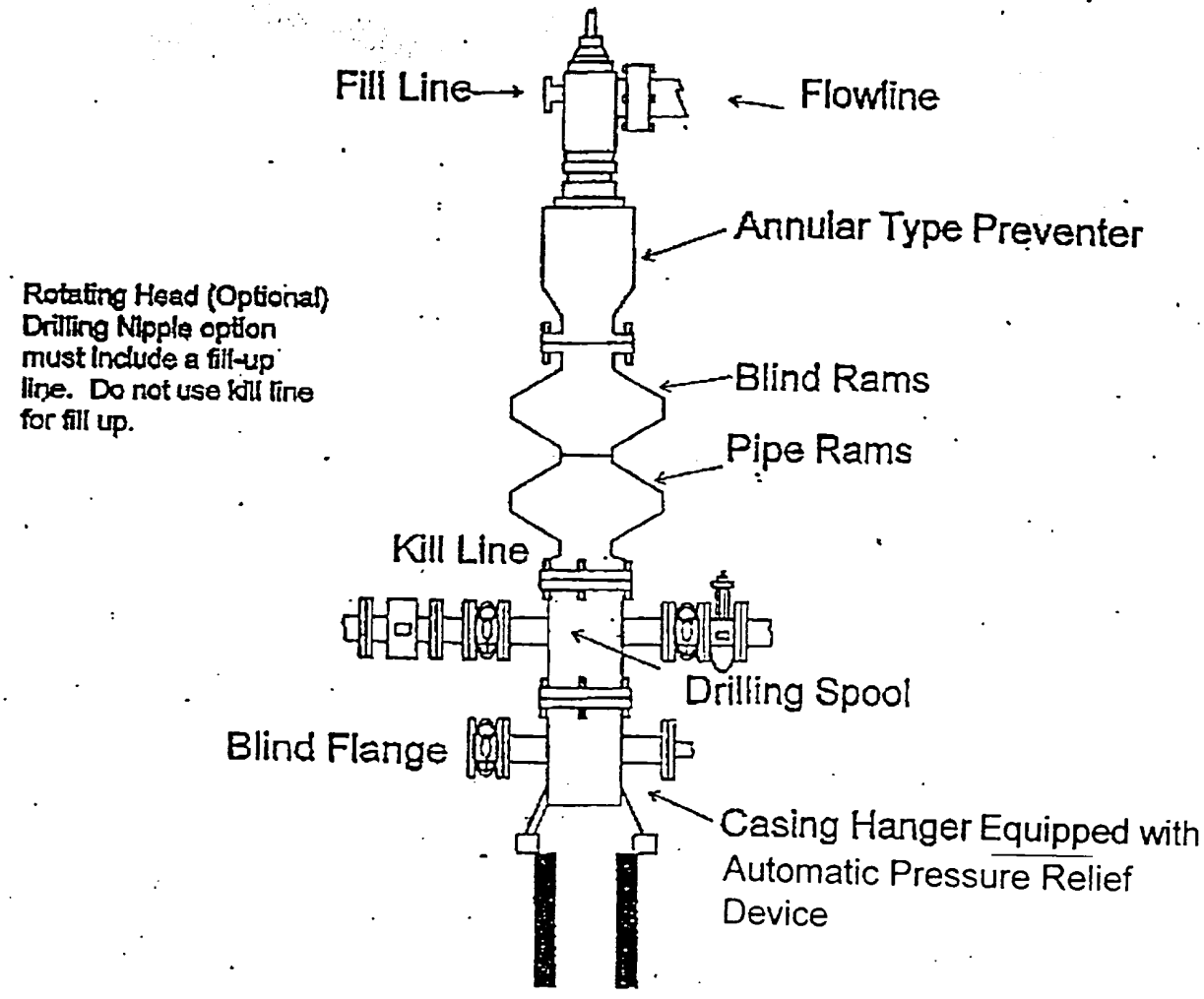
KUKUI Operating Company

GOODNIGHT '35' FEDERAL #1
SEC. 35 - T 23 S - R 29 E
EDDY COUNTY, NEW MEXICO

PROPOSED WELLBORE SCHEMATIC

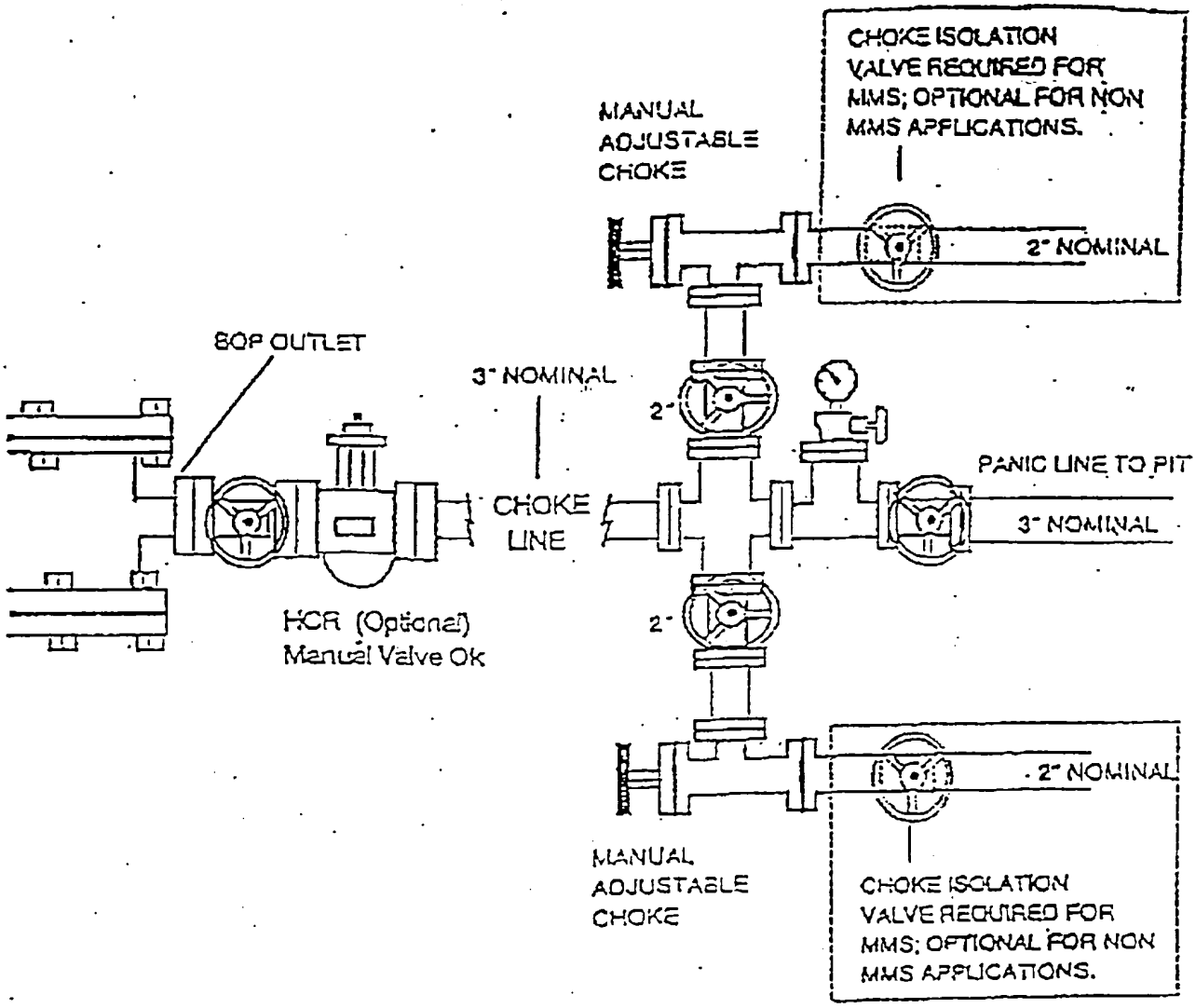


Larry K. Strider 1/4/00



3M/5M/10M Service

KUKUI Operating Company
BOPE Schematic



KUKUI Operating Company
Choke Manifold
3M/5M/10M Service

SURFACE USE AND OPERATIONS PLAN FOR DRILLING, COMPLETION, AND PRODUCING

KUKUI Operating Company

Goodnight 35 Federal #1
2,180' FWL & 660' FSL, Section 35, T23S, R29E
Eddy County, New Mexico

LOCATED:

Ten miles Northeast of Malaga, New Mexico

OIL & GAS LEASE:

NMNM103604

RECORD LESSEE:

U.S. Government

BOND COVERAGE:

$25,000 statewide bond of KUKUI Operating Company.

ACRES IN LEASE:

320 acres

GRAZING LEASE:

Raymond McDonald
P.O. Box 66
Malaga, New Mexico 88263
(505) 745 - 3782

POOL:

Cedar Canyon (Morrow)

EXHIBITS:

A. Area Road Map
B. Drilling Rig Layout
C. Vicinity Oil & Gas Map
D. Topographic & Location Verification Map
E. Well Location & Acreage Dedication Plat

This well will be drilled to a depth of approximately 14,300'(TD).

1. **EXISTING ROADS:**

   A. Exhibit "A" is a portion of a section map showing the location of the proposed well as staked.

   B. Exhibit "C" is a plat showing existing roads in the vicinity of the proposed well site.

2. **ACCESS ROADS:**

   A. **Length and Width:**

   2,700' x 12' of new road from the South

   B. **Surface Material:**

   Existing.

   C. **Maximum Grade:**

   Less than two percent.

   D. **Turnouts:**

   None necessary.

   E. **Drainage Design:**

   Existing.

   F. **Culverts:**

   None necessary.

   G. **Gates and Cattle Guards:**

   (1) Standard 8' cattleguard located about 660' South of location.

3. **LOCATION OF EXISTING WELLS:**

   Existing wells in the immediate area are shown on Exhibit "C".

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:**

   Necessary production facilities for this well will be located on the well pad.

5. **LOCATION AND TYPE OF WATER SUPPLY:**

   It is not contemplated that a water well will be drilled. Water necessary for drilling will be purchased and hauled to the site over existing roads shown on Exhibit "D".

6. METHODS OF HANDLING WASTE DISPOSAL:

A. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

B. Water produced during tests will be disposed of in the drilling pits.

C. Oil produced during tests will be stored in test tanks.

D. Trash will be contained in a trash trailer and removed from well site.

E. All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

7. ANCILLARY FACILITIES:

None required.

8. WELL SITE LAYOUT:

Exhibit "B" shows the relative location and dimensions of the well pad, mud pits, reserve pit, and trash trailer and the location of major rig components. Reserve pit to be lined.

9. PLANS FOR RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. The well site will be cleaned of all trash leaving the site aesthetically pleasing to the extent possible.

B. After abandonment, all equipment, trash and debris will be removed and the site will be clean.

10. OTHER INFORMATION:

A. Topography:

The land surface at the well site is rolling native grass with a regional slope being to the east. Playa lakes are in the vicinity.

Wellsite is located in the potash mining area and RP111P rules and regulations will apply.

B. Soil:

Top soil at the well site is loam with rock.

C. Flora and Faunal:

The location is in an area sparsely covered with mesquite and range grasses.

10. OTHER INFORMATION: (CONTINUED)

D. Ponds and Streams:

There are no rivers or streams in the area. However, there are salt playas. The closest salt playa is farther than 200 meters from the location.

E. Residences and Other Structures:

There are no residences within a mile of the proposed well site.

F. Archaeological, Historical, and Cultural Sites:

None observed in this area.

G. Land Use:

Land is being used for cattle grazing.

H. Surface Ownership:

Bureau of Land Management
620 E. Greene Street
Carlsbad, New Mexico 88240

11. OPERATOR'S CONSULTANT:

E. Scott Kimbrough
201 West Wall, Suite 803
Midland, TX 79701
Office: (915) 682-2500
Home: (915) 687-4279

12. CERTIFICATION:

I hereby certify that I , or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by KUKUI Operating Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approve.

Date 1/31/2000

Larry K. Strider
District Operations Manager