## ORYX ENERGY COMPANY DRILLING PROGRAM

## J.A.AKEN # 24

DIRECTIOAL: RUN DRIFT TYPE SURVEYS AT 250' AND 500' ON SURFACE HOLE INTERVAL. RUN SURVEYS ON PRODUCTION HOLE EVERY 500' AND ALL BIT TRIPS.

| 0-500'  | 250 <b>′</b> | AND | 500 <b>′</b> | 2 | 1 / 100' |
|---------|--------------|-----|--------------|---|----------|
| 500'-TD | 500 <b>′</b> | AND | BIT TRIPS    | 4 | 1 / 100' |

WELLHEAD

EOUIPMENT: BRADENHEAD 8-5/8" 2000 PSI WP TYPE 92 SOW CASING

HEAD ( LARKIN-HINDERLITER )

TUBINGHEAD WHI-W2 7-1/16" X 3,000 PSI X 5-1/2"

8RD ( CAVANAUGH-NATIONAL )

TREE 2-3/8" SINGLE MASTER, SINGLE WING AND

ADJUSTABLE CHOKE.

## CASING PROGRAM:

| CASING SEAT             | FEET          | SIZE                    | WT   | GRADE | JOINT               | ID                      | MAX<br>OD |
|-------------------------|---------------|-------------------------|------|-------|---------------------|-------------------------|-----------|
| 500'<br>3700'<br>TUBING | 3700 <b>′</b> | 8-5/8<br>5-1/2<br>2-3/8 | 15.5 | K-55  | ST&C<br>ST&C<br>EUE | 7.972<br>4.825<br>1.947 | 6.050     |

5-1/2" 15.50/FT USED FOR CASING FRAC WITH MAX SURFACE PRESSURE OF 3500 PSI DURING A 13.0 PPG SAND/FOAM FRAC DOWN CASING.

NOTE: AFTER ARRIVING ON LOCATION, PULL THREAD PROTECTORS OFF AND INSPECT CASING WITH VTI, TP AND FLD. THOROUGHLY CLEAN THREADS BEFOR MAKE-UP. ALL THREADS SHOULD BE DOPED W/OIL CENTER RESEARCH OCR-318 THREAD LUBRICANT.

## FLOAT

EQUIPMENT: ON 8-5/8" SURFACE CASING, INSTALL A CENTRALIZER AND A STOP RING 10' ABOVE THE SHOE AND CENTRALIZE EVERY THIRD COLLAR TO SURFACE. ( TOTAL OF 5 CENTARLIZERS ). RUN INSERT FLOAT AND A TEXAS PATTERN SHOE. RUN ONE (1) SHOE JOINT.

ON 5-1/2" PRODUCTION CASING RUN IN HOLE WITH ONE (1) SHOE JOINT, WITH A JET DOWN FLOAT SHOE AND A FLOAT COLLAR. THREAD LOCK ALL CEMENTING EQUIPMENT. WHILE RUNNING IN HOLE FILL CASING EVERY 20 JOINTS. CENTRALIZE SHOE, MIDDLE OF FIRST TWO JOINTS, AND EVERY 20' THOUGH THE PRODUCTION INTERVALS ( SEVEN RIVERS AND QUEEN ) USE TWO TURBULATOR TYPE CENTARLIZERS ABOVE AND BELOW EACH PRODUCTION INTERVAL.