



DIRECTIONAL  
INVESTMENT  
GUIDANCE, INC.

P.O. BOX 7238

MIDLAND, TEXAS 79708

915/697-1490

January 12, 1992

YATES PETROLEUM

HONNEVILLE AKA FED # 3

AL SPRINGER

EDDY COUNTY, N. M.

DIRECTIONAL RECOMMENDED PROCEDURE

- 1- MOVE IN AND RIG UP ROTARY.
- 2- GO IN HOLE WITH 12 1/2" BIT, SHOCK SUB, 8" NON MAGNETIC DRILL COLLAR, ONE 8" DRILL COLLAR, 12 1/4" STRING REAMER, ONE DRILL COLLAR, 12 1/4" I.B. STABILIZER, DRILL COLLARS AND DRILL PIPE. DRILL TO 2800' KICK OFF POINT AND TRIP OUT OF HOLE FOR KICK OFF ASSEMBLY.
- 3- GO IN HOLE WITH 12 1/2" BIT, 7 3/4" D500 DYNA DRILL, 1 1/2° BENT SUB, 8" NON MAGNETIC DRILL COLLAR, DRILL COLLARS AND DRILL PIPE. ORIENT THIS ASSEMBLY TO DESIRED DIRECTION WITH SINGLE SHOT AND DRILL UNTIL 3 1/2° TO 4 1/2° IS OBTAINED IN DESIRED DIRECTION AND TRIP OUT OF HOLE.
- 4- GO IN HOLE WITH 12 1/2" BIT, 12 1/4" I.B. STABILIZER, SHOCK SUB, 8" NON MAGNETIC DRILL COLLAR, ONE 8" DRILL COLLAR, 12 1/4" STRING REAMER, ONE DRILL COLLAR, 12 1/4" STRING REAMER, DRILL COLLARS AND DRILL PIPE. DRILL WITH THIS ASSEMBLY AND BUILD ANGLE AT THE RATE OF 1 1/2° PER 100' TO A MAXIMUM ANGLE OF 25.4° AT 4160' TRIP OUT OF HOLE FOR A SEMI-PACKED BOTTOM HOLE ASSEMBLY.
- 5- DRILL WITH SEMI PACKED BOTTOM HOLE ASSEMBLY TO 4350' T.V.D. CASING POINT, DROP MULTI-SHOT SURVEY AND TRIP OUT OF HOLE.
- 6- RIG AND RUN 8 5/8" CASING AND NIPPLE UP.
- 7- GO IN HOLE WITH 7 7/8" BIT, 7 7/8" I.B. STABILIZER, 6 1/4" NON MAGNETIC DRILL COLLAR, 7 7/8" I.B. STABILIZER, ONE DRILL COLLAR, 7 7/8" ROLLER REAMER, DRILL COLLARS AND DRILL PIPE. DRILL WITH THIS ASSEMBLY TO T.D. OR UNTIL A CORRECTIVE MOTOR RUN IS NEEDED TO BRING WELL BORE BACK TO COURSE.
- 8- AFTER REACHING PRIMARY TARGET, TRIP OUT AND PICK UP A FULL PACKED ASSEMBLY AND DRILL TO 8500' T.V.D. AND DROP MULTI-SHOT SURVEY ON TRIP OUT OF HOLE.

Direct-

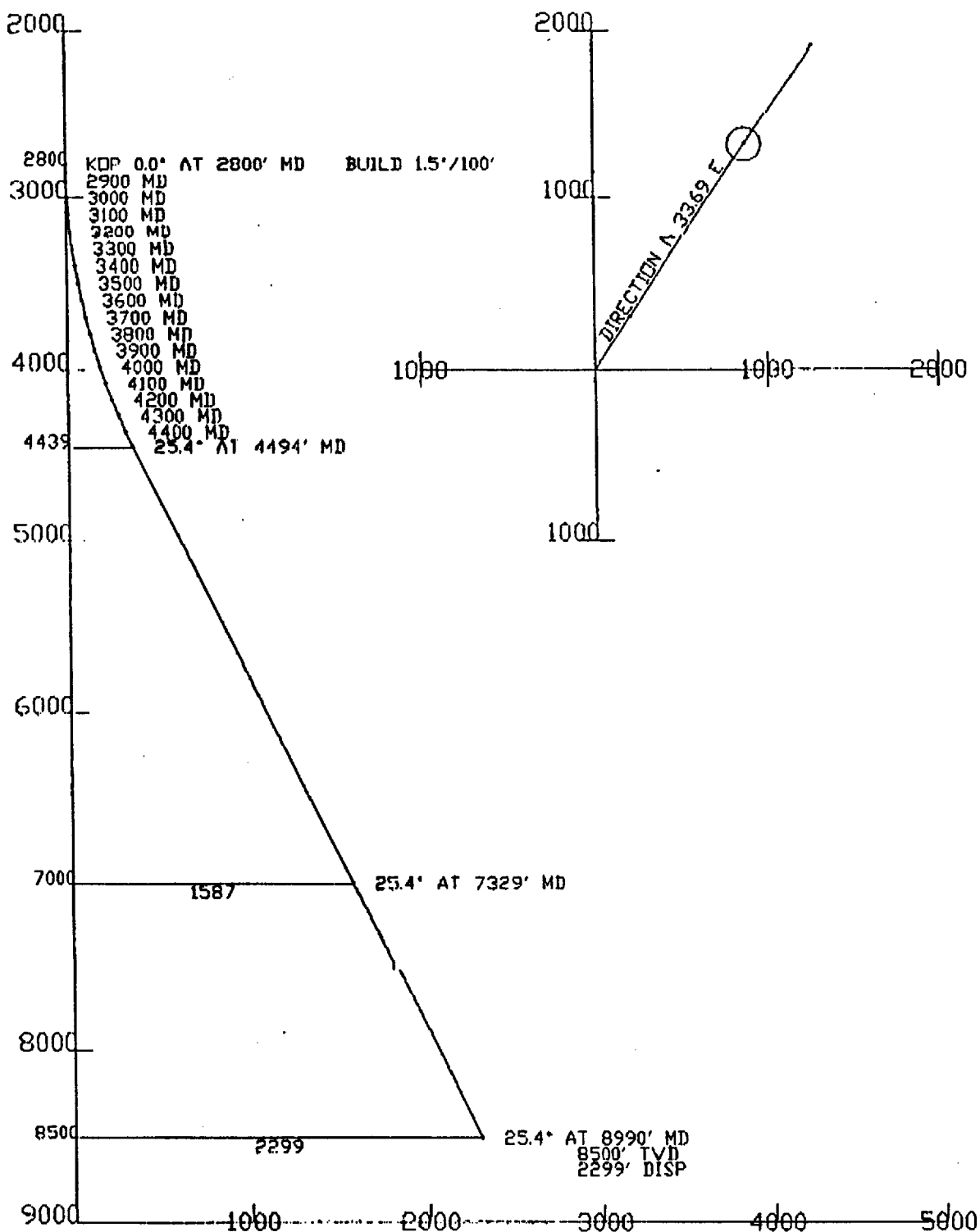
Surveying • Instrument & Tool Rentals

YATES PETROLEUM CORP.  
BEFORE EXAMINER CATANACH  
NMOC CASE NOS. 10460/10461  
DATE: 04/02/92  
EXHIBIT NO. 8

YATES PETROLEUM CORPORATION  
 BONNEVILLE AKA FLD #3  
 EDDY COUNTY, NEW MEXICO

File: DIG5 Tue Mar 10 1992

VERTICAL SECTION  
 SCALE: 1000 FEET/DIVISION  
 REFERENCE: WELL HEAD



VERTICAL SECTION PLANE: N 33.69 E

YATCO PETROLEUM CORPORATION  
BONNEVILLE AKK FEO #3  
EDDY COUNTY, NEW MEXICO

Calculated by Minimum Curvature Method

- DIRECTIONAL WELLPLAN -

| MEASURED<br>DEPTH<br>(FT) | INCL<br>ANGLE<br>(DEG) | D R I F T<br>DIRECTION<br>(DFG) | COURSE<br>LENGTH<br>(FT) | TRUE<br>VERTICAL<br>DEPTH | T O T A L<br>RECTANGULAR COORDINATES<br>(FT) | DOGLEG<br>SEVERITY<br>(DG/100') |
|---------------------------|------------------------|---------------------------------|--------------------------|---------------------------|----------------------------------------------|---------------------------------|
| 2800.00                   | 0.00                   | N 0.00 E                        | 0.00                     | 2800.00                   | 0.00 N 0.00 E                                |                                 |
| 2900.00                   | 1.50                   | N 33.69 E                       | 100.00                   | 2899.99                   | 1.09 N 0.73 E                                | 1.50                            |
| 3000.00                   | 3.00                   | N 33.69 E                       | 100.00                   | 2999.91                   | 4.96 N 2.90 E                                | 1.50                            |
| 3100.00                   | 4.50                   | N 33.69 E                       | 100.00                   | 3099.69                   | 9.80 N 6.53 E                                | 1.50                            |
| 3200.00                   | 6.00                   | N 33.69 E                       | 100.00                   | 3199.27                   | 17.41 N 11.61 E                              | 1.50                            |
| 3300.00                   | 7.50                   | N 33.69 E                       | 100.00                   | 3298.57                   | 27.19 N 18.13 E                              | 1.50                            |
| 3400.00                   | 9.00                   | N 33.69 E                       | 100.00                   | 3397.54                   | 39.13 N 26.09 E                              | 1.50                            |
| 3500.00                   | 10.50                  | N 33.69 E                       | 100.00                   | 3496.09                   | 53.22 N 35.48 E                              | 1.50                            |
| 3600.00                   | 12.00                  | N 33.69 E                       | 100.00                   | 3594.16                   | 69.45 N 46.90 E                              | 1.50                            |
| 3700.00                   | 13.50                  | N 33.69 E                       | 100.00                   | 3691.70                   | 87.81 N 58.54 E                              | 1.50                            |
| 3800.00                   | 15.00                  | N 33.69 E                       | 100.00                   | 3788.67                   | 108.29 N 72.20 E                             | 1.50                            |
| 3900.00                   | 16.50                  | N 33.69 E                       | 100.00                   | 3884.86                   | 130.88 N 87.25 E                             | 1.50                            |
| 4000.00                   | 18.00                  | N 33.69 E                       | 100.00                   | 3980.36                   | 155.55 N 103.70 E                            | 1.50                            |
| 4100.00                   | 19.50                  | N 33.69 E                       | 100.00                   | 4075.05                   | 182.30 N 121.53 E                            | 1.50                            |
| 4200.00                   | 21.00                  | N 33.69 E                       | 100.00                   | 4168.86                   | 211.09 N 140.73 E                            | 1.50                            |
| 4300.00                   | 22.50                  | N 33.69 E                       | 100.00                   | 4261.74                   | 241.93 N 161.28 E                            | 1.50                            |
| 4400.00                   | 24.00                  | N 33.69 E                       | 100.00                   | 4353.62                   | 274.77 N 183.18 E                            | 1.50                            |
| END OF CURVE              |                        |                                 |                          |                           |                                              |                                 |
| 4494.50                   | 25.42                  | N 33.69 E                       | 94.50                    | 4439.46                   | 307.63 N 205.09 E                            | 1.50                            |
| TARGET                    |                        |                                 |                          |                           |                                              |                                 |
| 7329.44                   | 25.42                  | N 33.69 E                       | 2834.95                  | 7000.00                   | 1320.06 N 880.04 E                           | 0.00                            |
| TARGET                    |                        |                                 |                          |                           |                                              |                                 |
| 8990.20                   | 25.42                  | N 33.69 E                       | 1660.75                  | 8500.00                   | 1913.16 N 1275.44 E                          | 0.00                            |