



DIRECTIONAL
INVESTMENT
GUIDANCE, INC.

P.O. BOX 7238

MIDLAND, TEXAS 79708

915/697-1490

January 12, 1992

YATES PETROLEUM

BONNEVILLE AKK FED # 2

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 3200' 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 14.60° 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 MULTISHOT 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 MULTISHOT SURVEY ON TRIP OUT OF HOLE.

YATES PETROLEUM CORP.

BEFORE EXAMINER CATANACH

NMOC CASE NOS. 10460/10461

DATE: 04/02/92

EXHIBIT NO. 8-A

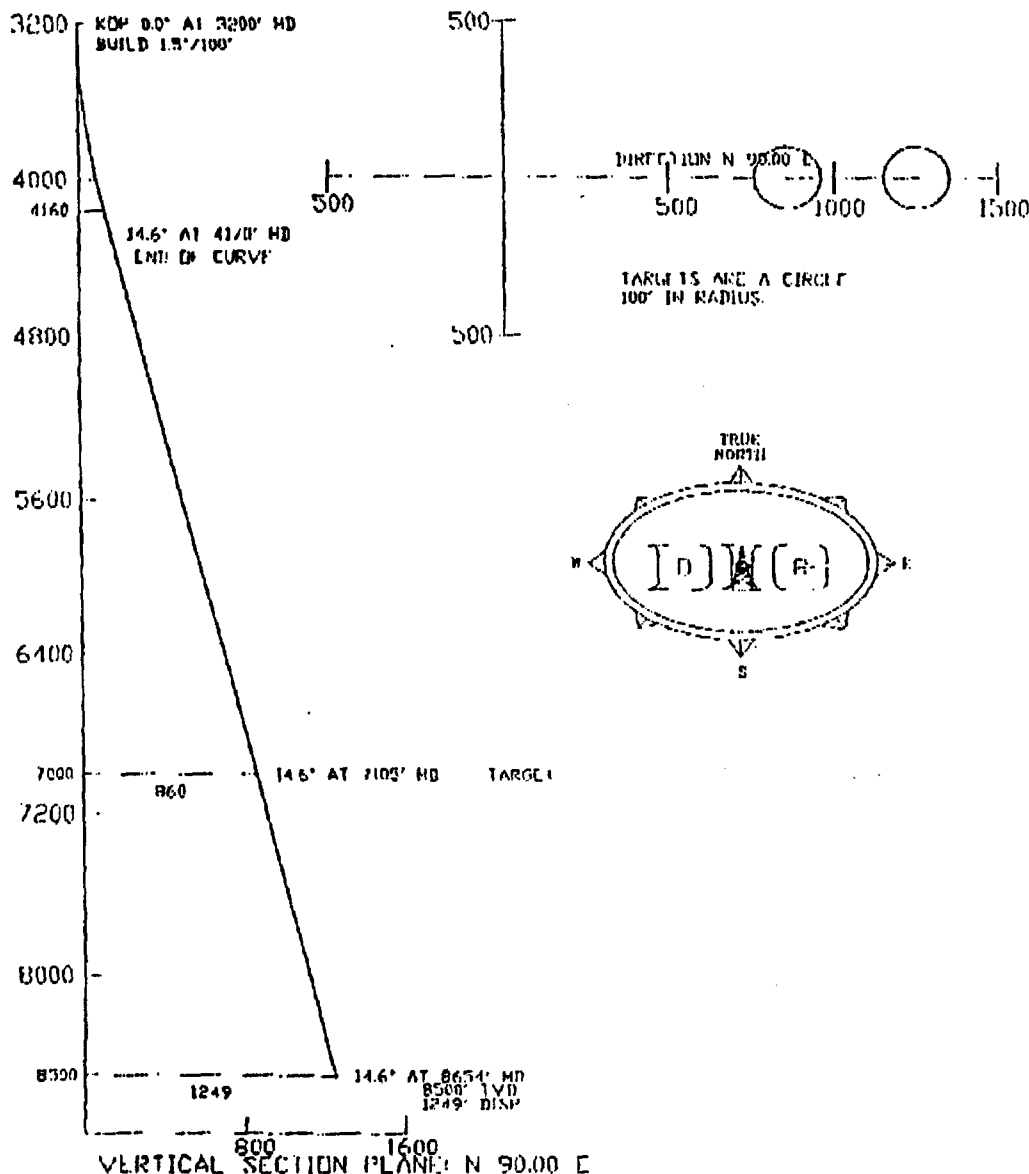
Directional Drilling • • • • • Instrument &

YATES PETROLEUM
BONNIVILLE ARK FLD #2
EDDY COUNTY, NEW MEXICO

(An: yates_Sdat Wed Feb 12 1992)

VERTICAL SECTION
SCALE: 800 FEET/DIVISION
REFERENCE: WELL HEAD

HORIZONTAL PLAN
SCALE: 500 FEET/DIVISION
REFERENCE: WELL HEAD



YATES PETROLEUM
BONNEVILLE ACK #2
EDDY COUNTY, NEW MEXICO

Calculated by Minimum Curvature Method
Vert Sect Plane: N 90.00 E

- DIRECTIONAL WELLPLAN -

MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TRUE VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	C L O S U R E DISTANCE DIRECTION (FT) (DEG)		DOGLEG SEVERITY (DEG/100')
3200.00	0.00	N 0.00 E	0.00	3200.00	0.00	N 0.00 E	0.00	0.00	N 0.00 E	
3300.00	1.50	N 90.00 E	100.00	3299.99	0.00	N 1.31 E	1.31	1.31	N 90.00 E	1.50
3400.00	3.00	N 90.00 E	100.00	3399.91	0.00	N 5.23 E	5.23	5.23	N 90.00 E	1.50
3500.00	4.50	N 90.00 E	100.00	3499.69	0.00	N 11.77 E	11.77	11.77	N 90.00 E	1.50
3600.00	6.00	N 90.00 E	100.00	3599.27	0.00	N 20.92 E	20.92	20.92	N 90.00 E	1.50
3700.00	7.50	N 90.00 E	100.00	3698.57	0.00	N 32.68 E	32.68	32.68	N 90.00 E	1.50
3800.00	9.00	N 90.00 E	100.00	3797.54	0.00	N 47.03 E	47.03	47.03	N 90.00 E	1.50
3900.00	10.50	N 90.00 E	100.00	3896.09	0.00	N 63.96 E	63.96	63.96	N 90.00 E	1.50
4000.00	12.00	N 90.00 E	100.00	3994.16	0.00	N 83.47 E	83.47	83.47	N 90.00 E	1.50
4100.00	13.50	N 90.00 E	100.00	4091.70	0.00	N 105.54 E	105.54	105.54	N 90.00 E	1.50
END OF CURVE										
4170.35	14.56	N 90.00 E	70.35	4159.95	0.00	N 122.59 E	122.59	122.59	N 90.00 E	1.50
TARGET										
7104.57	14.56	N 90.00 E	2934.23	7000.00	0.00	N 860.00 E	860.00	860.00	N 90.00 E	0.00
7204.57	14.56	N 90.00 E	100.00	7096.79	0.00	N 885.13 E	885.13	885.13	N 90.00 E	0.00
7304.57	14.56	N 90.00 E	100.00	7193.58	0.00	N 910.26 E	910.26	910.26	N 90.00 E	0.00
7404.57	14.56	N 90.00 E	100.00	7290.37	0.00	N 935.39 E	935.39	935.39	N 90.00 E	0.00
7504.57	14.56	N 90.00 E	100.00	7387.16	0.00	N 960.53 E	960.53	960.53	N 90.00 E	0.00
7604.57	14.56	N 90.00 E	100.00	7483.95	0.00	N 985.66 E	985.66	985.66	N 90.00 E	0.00
7704.57	14.56	N 90.00 E	100.00	7580.74	0.00	N 1010.79 E	1010.79	1010.79	N 90.00 E	0.00
7804.57	14.56	N 90.00 E	100.00	7677.53	0.00	N 1035.92 E	1035.92	1035.92	N 90.00 E	0.00
7904.57	14.56	N 90.00 E	100.00	7774.32	0.00	N 1061.05 E	1061.05	1061.05	N 90.00 E	0.00
8004.57	14.56	N 90.00 E	100.00	7871.12	0.00	N 1086.18 E	1086.18	1086.18	N 90.00 E	0.00
8104.57	14.56	N 90.00 E	100.00	7967.91	0.00	N 1111.31 E	1111.31	1111.31	N 90.00 E	0.00
8204.57	14.56	N 90.00 E	100.00	8064.70	0.00	N 1136.44 E	1136.44	1136.44	N 90.00 E	0.00
8304.57	14.56	N 90.00 E	100.00	8161.49	0.00	N 1161.58 E	1161.58	1161.58	N 90.00 E	0.00
8404.57	14.56	N 90.00 E	100.00	8258.28	0.00	N 1186.71 E	1186.71	1186.71	N 90.00 E	0.00
8504.57	14.56	N 90.00 E	100.00	8355.07	0.00	N 1211.84 E	1211.84	1211.84	N 90.00 E	0.00
8604.57	14.56	N 90.00 E	100.00	8451.86	0.00	N 1236.97 E	1236.97	1236.97	N 90.00 E	0.00

YATES PETROLEUM
 BONNEVILLE AKK PED #2
 EDDY COUNTY, NEW MEXICO

Calculated by Minimum Curvature Method
 Vert Sect Plane: N 90.00 E

- DIRECTIONAL WELLPLAN -

MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D N I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TRUE VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)	VERTICAL SECTION (FT)	C L O S U R E DISTANCE (FT)	DIRECTION (DEG)	DOGLEG SEVERITY (DG/100')
8654.31	14.96	N 90.00 E	49.74	8500.00	0.00 N 1249.47 E	1249.47	1249.47	N 90.00 E	0.00

Survey Ref: Well Head Closure Ref: Well Head Vert Sect Ref: Well Head
 Wed Feb 12 1992 14:34:38 File: yates_5.dat