

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OPER. OGRID NO. 5073
PROPERTY NO. 3122
POOL CODE 63120

FORM APPROVED
OMB NO. 1004-0136
Expires February 28, 1995

APPLICATION FOR PERMIT

1. TYPE OF WORK

DRILL ☒

2. TYPE OF WELL

WELL ☒

GAS WELL ☐

OTHER ☐

3. NAME OF OPERATOR

Conoco Inc.

4. ADDRESS AND TELEPHONE NO.

10 Desta Dr. Ste 430E, Midland, Tx. 79705-4500

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements *)

At surface

345' FSL & 1955' FEL

At proposed prod. zone

Unit 9
345' FSL & 1955' FEL

6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

5. LEASE DESIGNATION AND SERIAL NO.

LC 0634580

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Warren Unit

8. FARM OR LEASE NAME WELL NO.

147

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT

Warren Drinkard East

11. SEC. T., R., M., OR BLK.
AND SURVEY OR AREA

Sec. 26, T20-S, R38-E

12. COUNTY OR PARISH

Lea

13. STATE

NM

5. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if Any)

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

8. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

7250'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3561' GR

22. APPROX. DATE WORK WILL START*

5/31/98

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	M-50, 8-5/8"	23#	1500'	600 sxs, circ.
7-7/8"	K-55, 5-1/2"	17#	7250'	1355 sxs, circ.

It is proposed to drill a vertical wellbore as a Drinkard producer. NOS was filed 3/30/98. The well will be drilled and equipped according to the following additional attachments:

1. Well Location & Acreage Dedication Plat (C-102) along with other associated maps and plats.
2. Proposed Well Plan Outline
3. Cementing Plan.
4. Surface Use Plan.
5. Trailer Mounted Rig Layout Drawing.
6. BOP & Choke Manifold Specifications.
7. H2S Drilling Operations Plan.
8. Surface owner communications.

LIA COUNTY CONTROLLED WATER BASIN

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

This application includes ROW's for the well pad, access road and flowline.

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described above and as covered by BLM Bend File No. ES-0085.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Jo Ann Johnson

TITLE

Jo Ann Johnson

Property Analyst

DATE

5-8-98

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval 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.

CONDITIONS OF APPROVAL, IF ANY:

Acting

Assistant Field Office Manager,
Lands and Minerals

DATE

MAY 13 1998

APPROVED BY

TITLE

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-34463	² Pool Code 63120	³ Pool Name Warren Drinkard East
⁴ Property Code 003122	⁵ Property Name WARREN UNIT	⁶ Well Number 147
⁷ GRID No. 005073	⁸ Operator Name CONOCO INC.	⁹ Elevation 3561'

¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	26	20-S	38-E		345	SOUTH	1955	EAST	LEA

¹¹Bottom 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

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------------	-------------------------------	----------------------------------	-------------------------

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

16				<p>17 OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p><i>Jo Ann Johnson</i> Signature Jo Ann Johnson Printed Name Property Analyst Title April 30, 1998 Date</p>
				<p>18 SURVEYOR CERTIFICATION <i>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 best of my belief.</i></p> <p>APRIL 13, 1998 Date of Survey Signature and Seal of Professional Surveyor: <i>[Signature]</i></p> <p>Certificate Number 8278</p>

LAT.=32°32'15"
LONG.=103°06'59"

345'

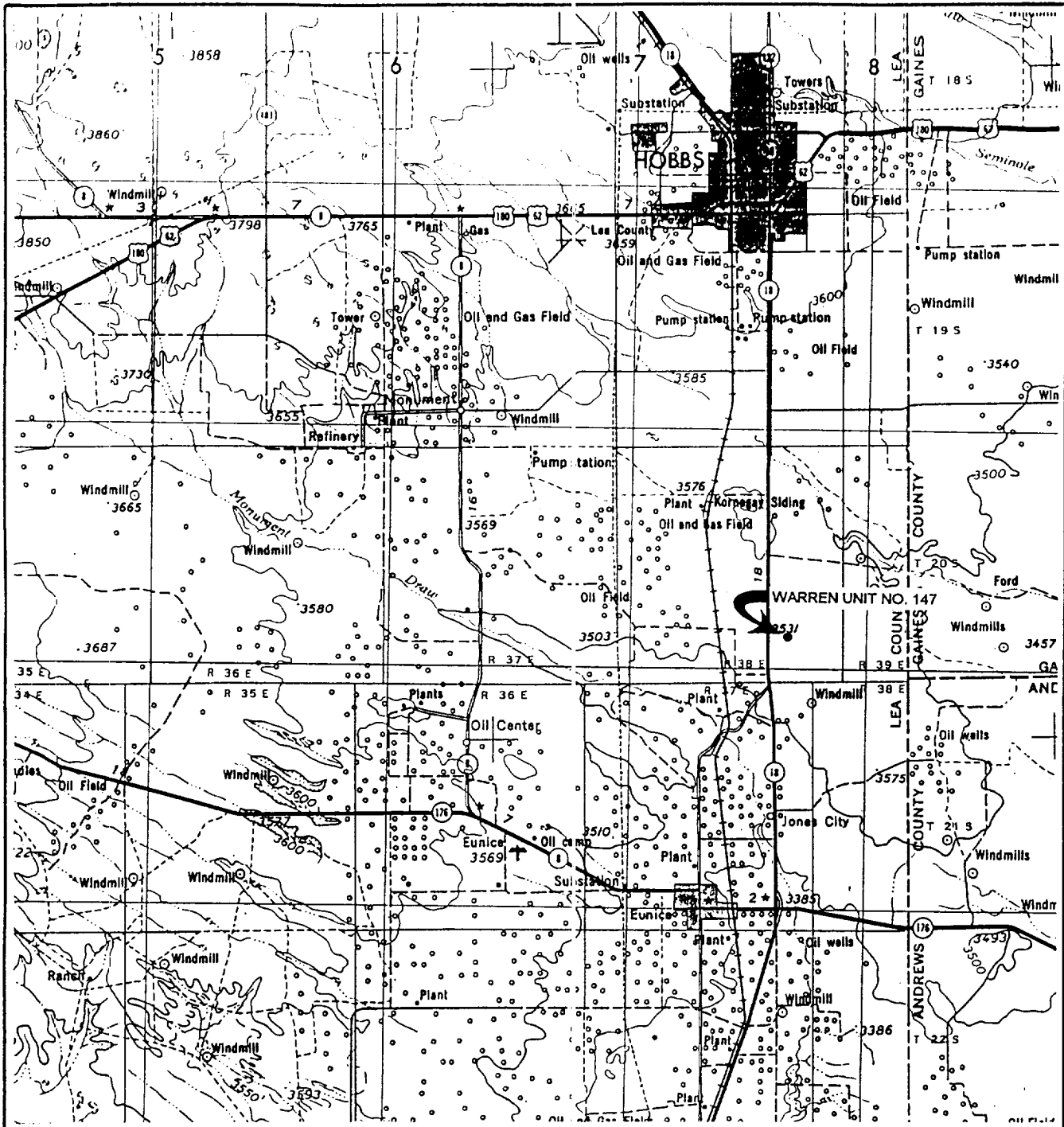
1955'

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971) using a Shimadzu 1010 spectrophotometer.

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

Received
Hobbs
OCD

VICINITY MAP



SCALE: 1" = 4 MILES

WTC 45237

SEC. 26 TWP. 20-S RGE. 38-E

SURVEY N.M.P.M

COUNTY LEA STATE NM

DESCRIPTION 345' FSL & 1955' FEL

ELEVATION 3561'

OPERATOR CONOCO INC.

LEASE WARREN UNIT NO. 147

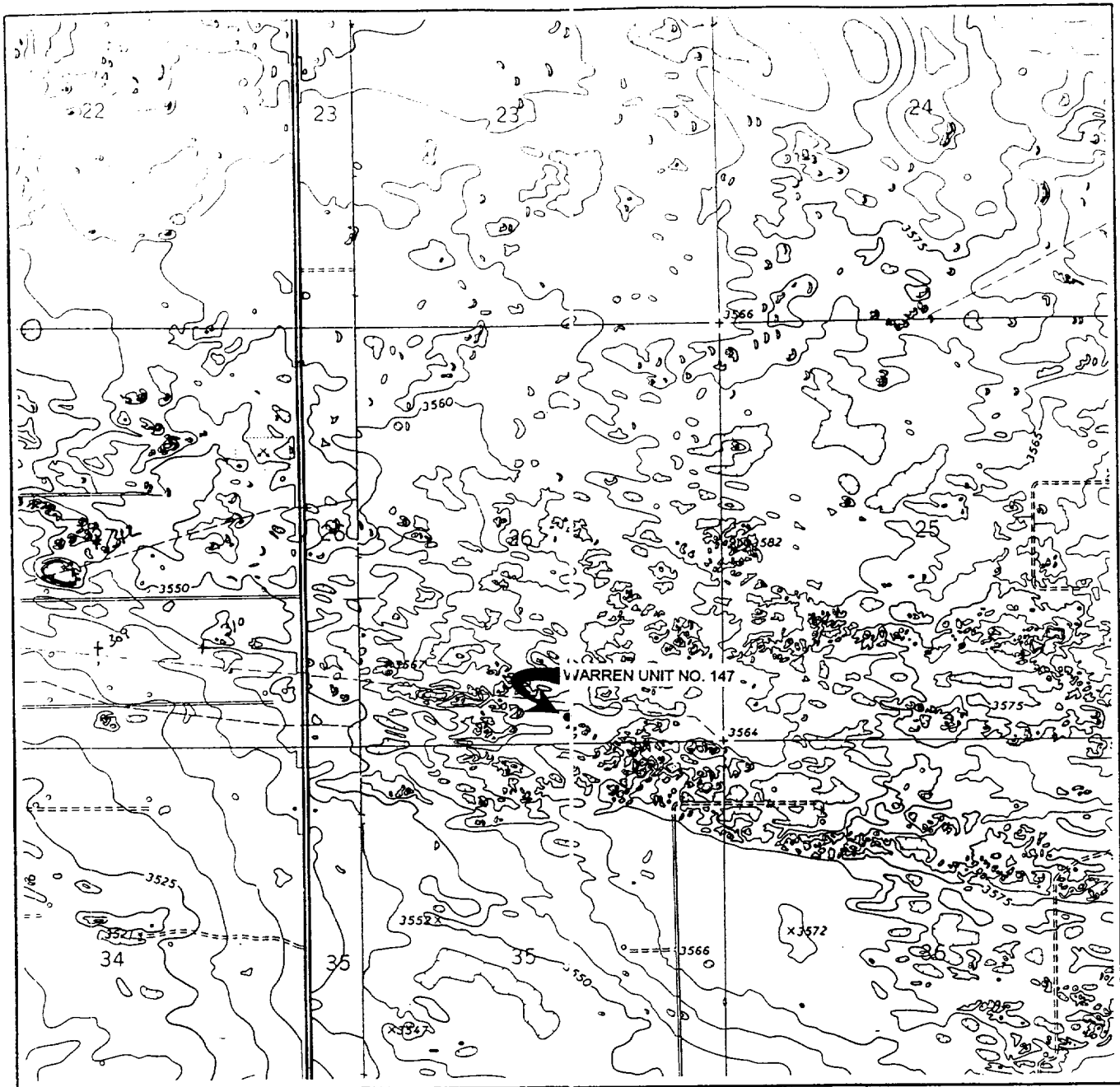
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800

LOCATION VER FICATION MAP



SCALE: 1" = 2000'
WTC 45237

CONTOUR INTERVAL 5'

SEC. 26 TWP. 20-S RGE. 38-E

SURVEY N.M.P.M

COUNTY LEA STATE NM

DESCRIPTION 345' FSL & 1955' FEL

ELEVATION 3561'

OPERATOR CONOCO INC.

LEASE WARREN UNIT NO. 147

USGS TOPO MAP HOBBS SW, NEW MEXICO, HOBBS SE,
TEXAS-NEW MEXICO

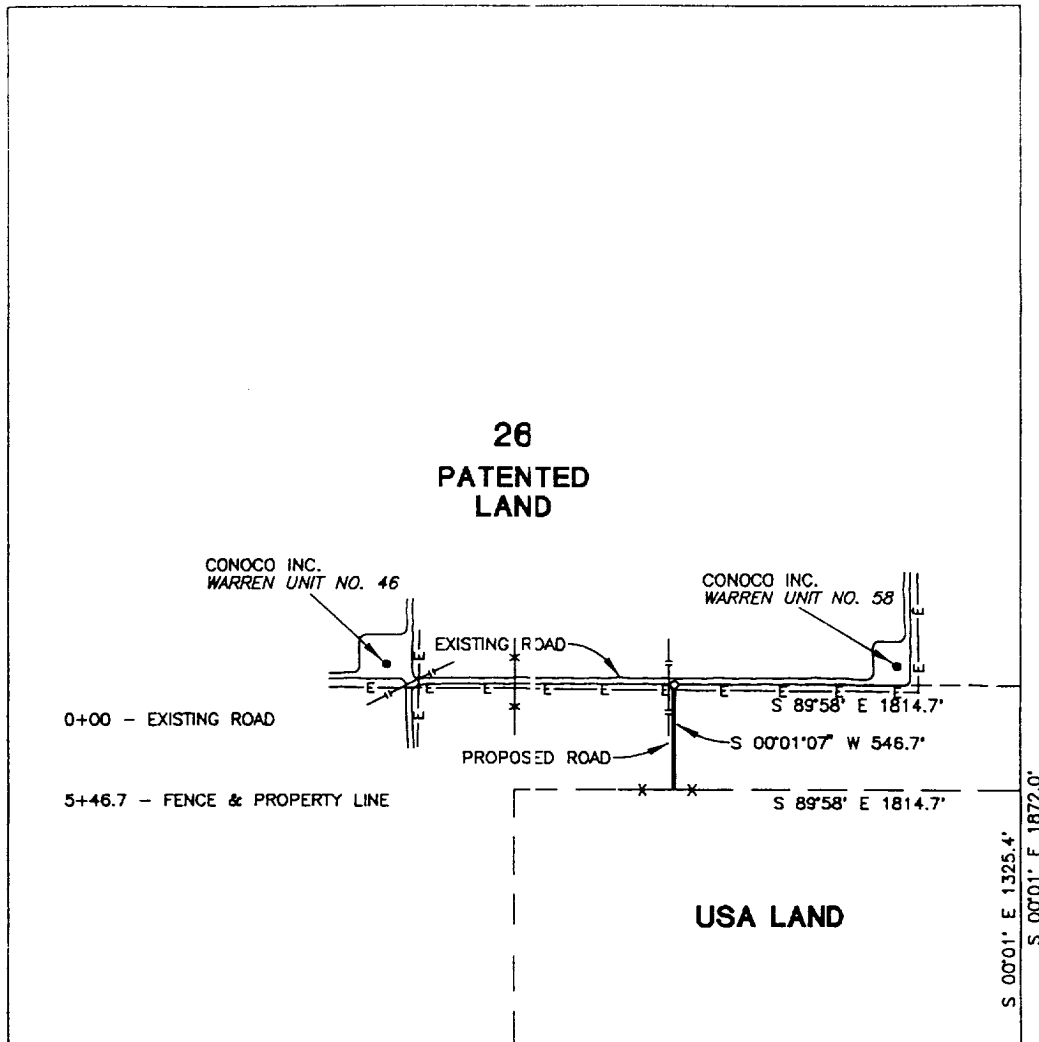
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800

SECTION 26, T20S, R38E, N.M.P.M.
LEA COUNTY, NEW MEXICO

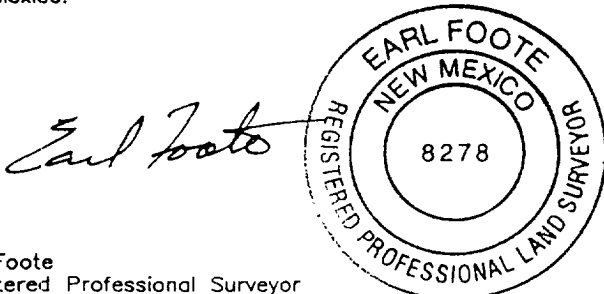


CENTERLINE DESCRIPTION OF A PROPOSED ROAD:

BEGINNING at a point in an existing road, from which point the southeast corner of Section 26, T-20-S, R-38-E, N.M.P.M., Lea County, New Mexico bears S 89° 58' E, 1814.7 feet and S 00° 01' E, 1872.0 feet;
THENCE S 00° 01' 07" W, with the centerline of proposed road, 546.7 feet to a point in the S/2 of the SE/4 of said Section 26, for the end of this line, from which point the southeast corner of said Section 26 bears S 89° 58' E, 1814.7 feet and S 00° 01' E, 1325.4 feet.

PROPOSED ROAD TO SERVE
WARREN UNIT NO. 147

I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.



Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278

CONOCO INC.

546.7 feet of proposed road in
Section 26, T-20-S, R-38-E, N.M.P.M.,
Lea County, New Mexico

WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

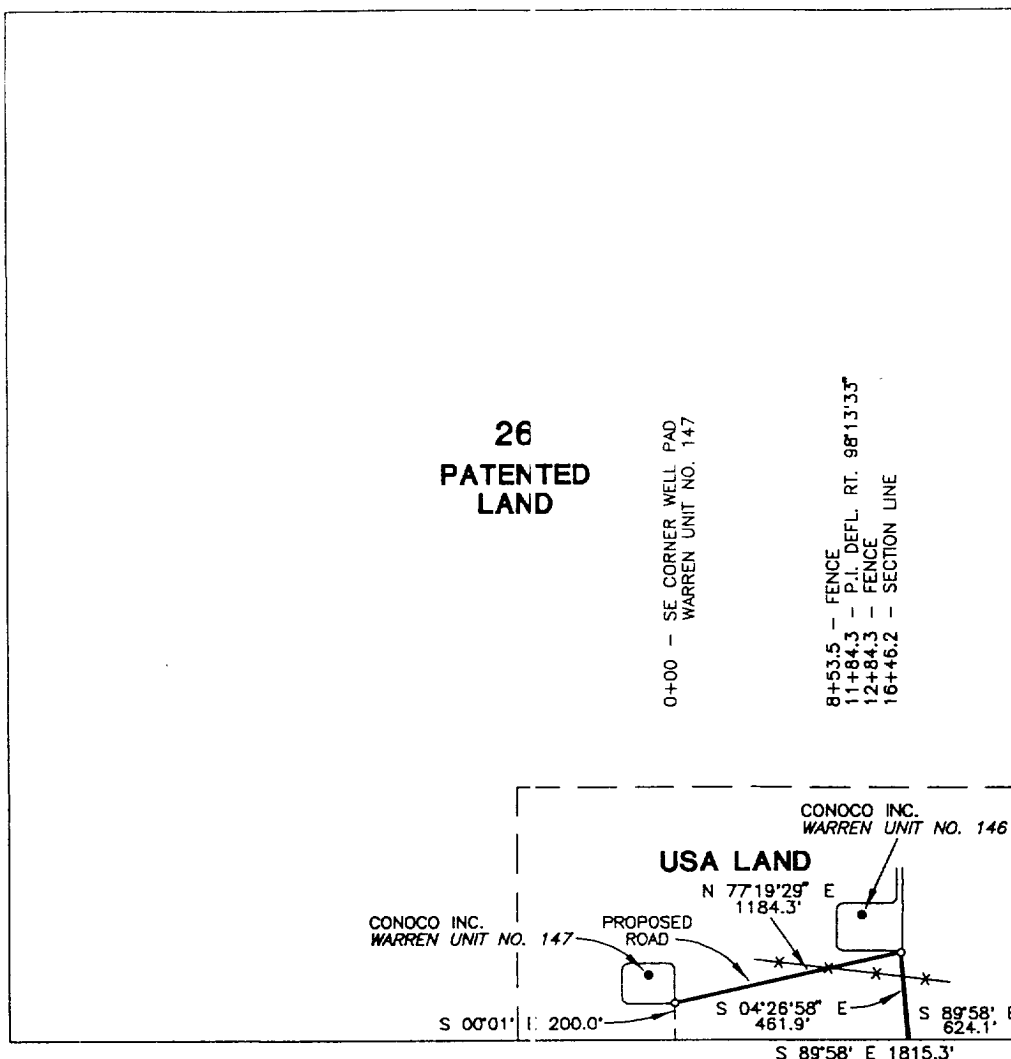
Survey Date: 4-13-98	Date: 4-21-98	Scale: 1" = 1000'
WTC No. 45237	Drawn By: R.S.	Sheet 1 of 2

NEW MEXICO



Survey Date: 4-13-98	Date: 4-21-98	Scale: 1" = 1000'
WTC No. 45237	Drawn By: R.S.	Sheet 2 of 2

SECTION 26, T-20-S, R-38-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



CENTERLINE DESCRIPTION OF A PROPOSED ROAD:

BEGINNING at a point in the southeast corner of a well pad for Conoco Inc. WARREN UNIT NO. 147, from which point the southeast corner of Section 26, T-20-S, R-38-E, N.M.P.M., Lea County, New Mexico bears S 00° 01' E, 200.0 feet and S 89° 58' E, 1815.3 feet;

THENCE N 77° 19' 29" E, with the centerline of proposed road, 1184.3 feet to a bend;

THENCE S 04° 26' 58" E, with the centerline of proposed road, 461.9 feet to a point in the South Line of said Section 26, for the end of this line, from which point the southeast corner of said Section 26 bears S 89° 58' E, 624.1 feet.

PROPOSED ROAD TO SERVE
WARREN UNIT NO. 147

I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.

Earl Foote



Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278

CONOCO INC.

1646.2 feet of proposed road in
Section 26, T-20-S, R-38-E, N.M.P.M.,
Lea County, New Mexico

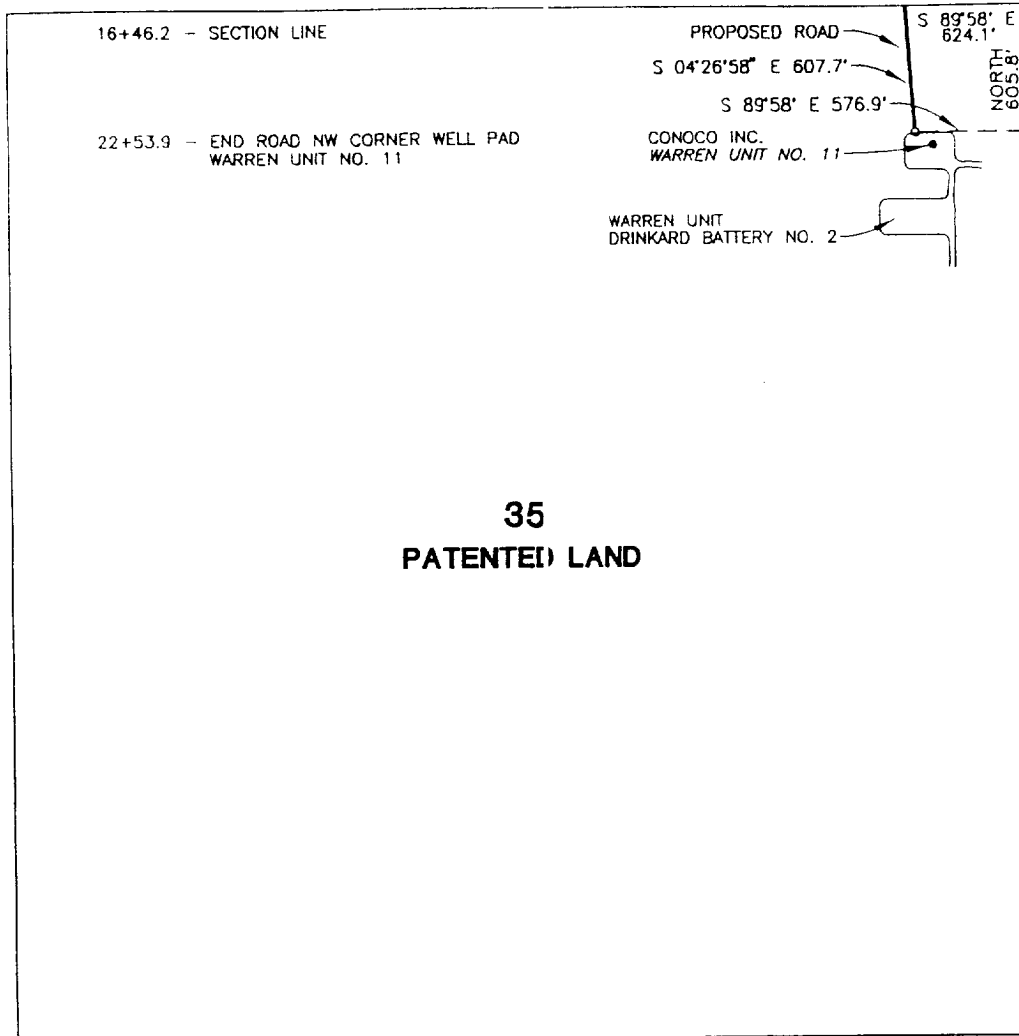
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

Survey Date: 4-13-98	Date: 4-21-98	Scale: 1" = 1000'
WTC No. 45237	Drawn By: R.S.	Sheet 1 of 2

SECTION 35, T20S, R38E, N.M.P.M.
LEA COUNTY, NEW MEXICO



CENTERLINE DESCRIPTION OF A PROPOSED ROAD:

BEGINNING at a point in the North Line of Section 35, T-20-S, R-38-E, N.M.P.M., Lea County, New Mexico, from which point the northeast corner of said Section 35 bears S 89° 58' E, 624.1 feet;

THENCE S 04° 26' 58" E, with the centerline of proposed road, 607.7 feet to a point in the northwest corner of well pad for Conoco Inc. WARREN UNIT NO. 11, for the end of this line, from which point the northeast corner of said Section 35 bears S 89° 58' E, 576.9 feet and North 605.8 feet.

PROPOSED ROAD TO SERVE
WARREN UNIT NO. 147

CONOCO INC.

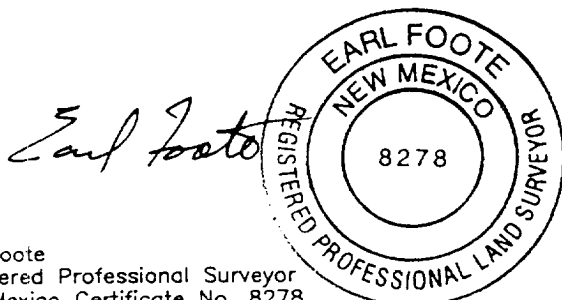
607.7 feet of proposed road in
Section 35, T-20-S, R-38-E, N.M.P.M.,
Lea County, New Mexico

WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

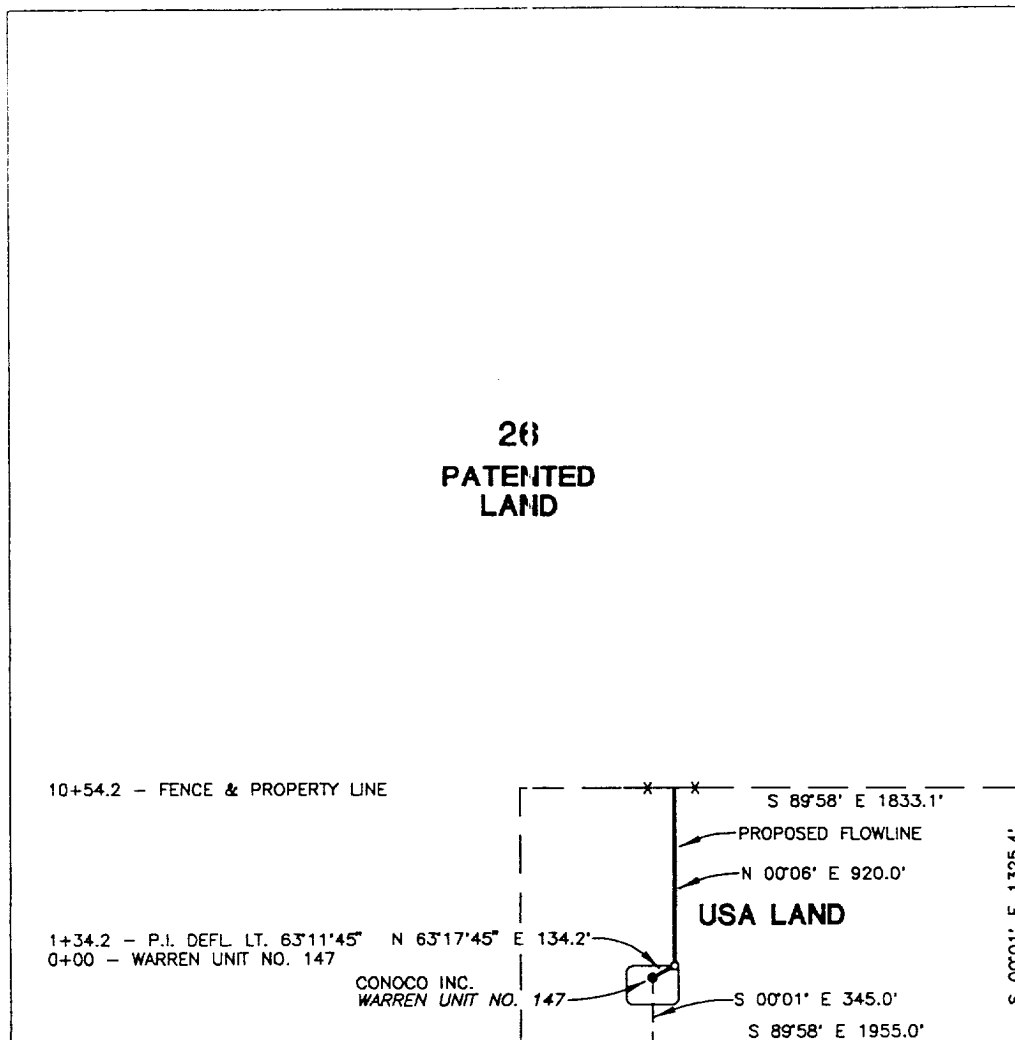
I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.



Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278

Survey Date: 4-13-98	Date: 4-21-98	Scale: 1" = 1000'
WTC No. 45237	Drawn By: R.S.	Sheet 2 of 2

SECTION 26, T-20-S, R-38-E, N.M.P.M.,
LEA COUNTY, NEW MEXICO



CENTERLINE DESCRIPTION OF A PROPOSED FLOWLINE:

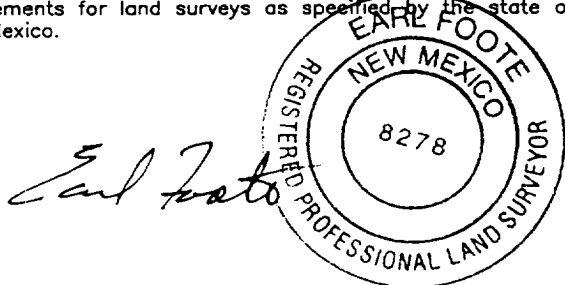
BEGINNING at Conoco Inc. WARREN UNIT NO. 147, from which point the southeast corner of Section 26, T-20-S, R-38-E, N.M.P.M., Lea County, New Mexico bears S 89° 58' E, 1955.0 feet;

THENCE N 63° 17' 45" E, with the centerline of proposed flowline, 134.2 feet to a bend;

THENCE N 00° 06' E, with the centerline of proposed flowline, 920.0 feet to a point in the S/2 of the SE/4 of said Section 26, for the end of this line, from which point the southeast corner of said Section 26 bears S 89° 58' E, 1833.1 feet and S 00° 01' E, 1325.4 feet.

PROPOSED FLOWLINE TO SERVE
WARREN UNIT NO. 147

I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.



Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278

CONOCO INC.

1054.2 feet of proposed flowline in
Section 26, T-20-S, R-38-E, N.M.P.M.,
Lea County, New Mexico

WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

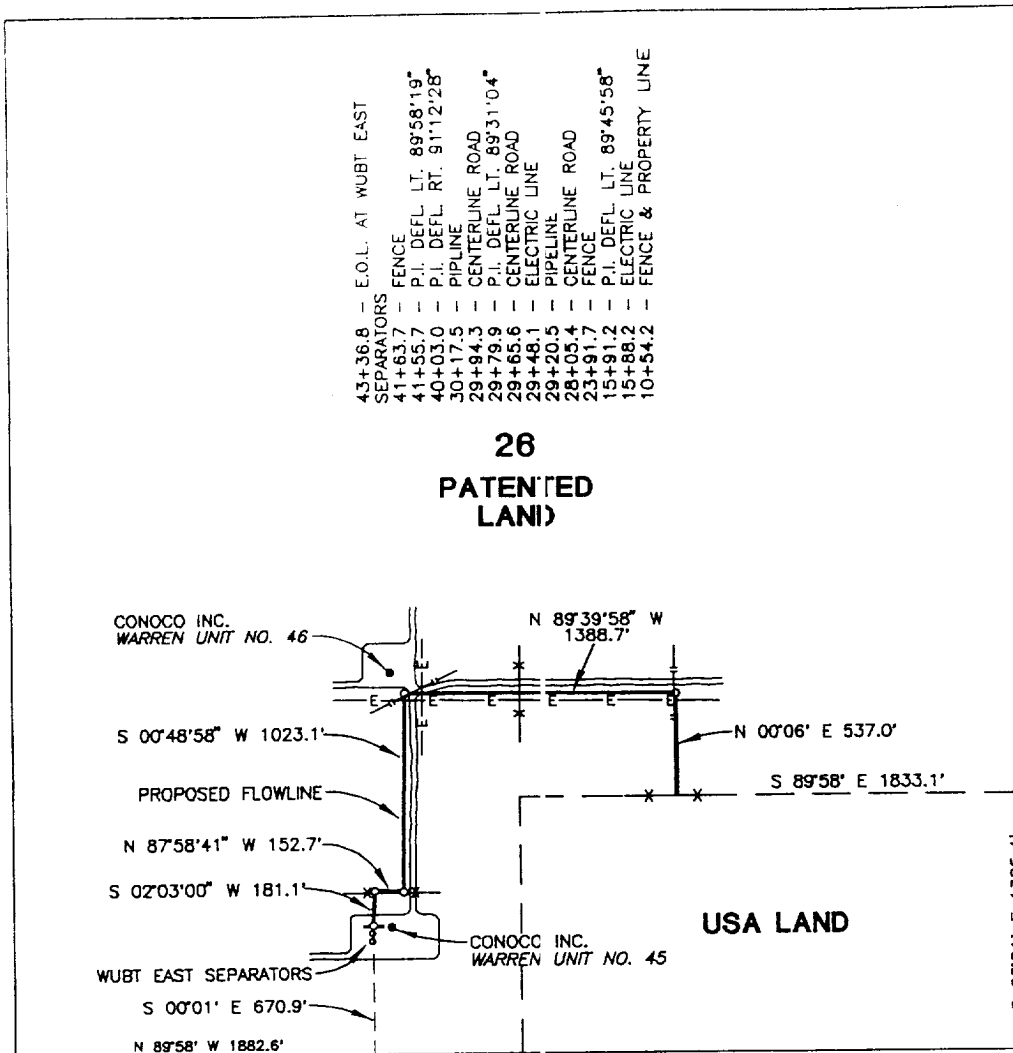
MIDLAND, TEXAS

Survey Date: 4-13-98	Date: 4-21-98	Scale: 1" = 1000'
WTC No. 45237	Drawn By: R.S.	Sheet 1 of 2

SECTION 26,
LEA COUNTY,

SHIP 20 SOUTH, RANGE 38

T, N.M.P.M.
NEW MEXICO



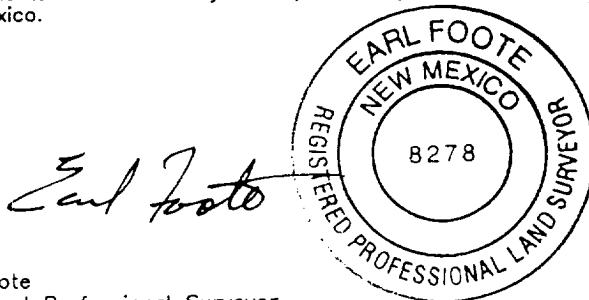
CENTERLINE DESCRIPTION OF A PROPOSED FLOWLINE:

BEGINNING at a point in the S/2 of the SE/4 of Section 26, T-20-S, R-38-E, N.M.P.M., Lea County, New Mexico, from which point the southeast corner of said Section 26 bears S 89° 58' E, 1833.1 feet and S 00° 01' E, 1325.4 feet;

THENCE with the centerline of proposed flowline as follows: N 00° 06' E, 537.0 feet; N 89° 39' 58" W, 1388.7 feet; S 00° 48' 58" W, 1023.1 feet; N 87° 58' 41" W, 152.7 feet and S 02° 03' 00" W, 181.1 feet to a point in the WUBT EAST SEPARATORS, for the end of this line, from which point the southwest corner of said Section 26 bears S 00° 01' E, 670.9 feet and N 89° 58' W, 1882.6 feet.

PROPOSED FLOWLINE TO SERVE
WARREN UNIT NO. 147

I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.



Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278

CONOCO INC.

3282.6 feet of proposed flowline in
Section 26, T-20-S, R-38-E, N.M.P.M.,
Lea County, New Mexico

WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

Survey Date: 4-13-98

Date: 4-21-98

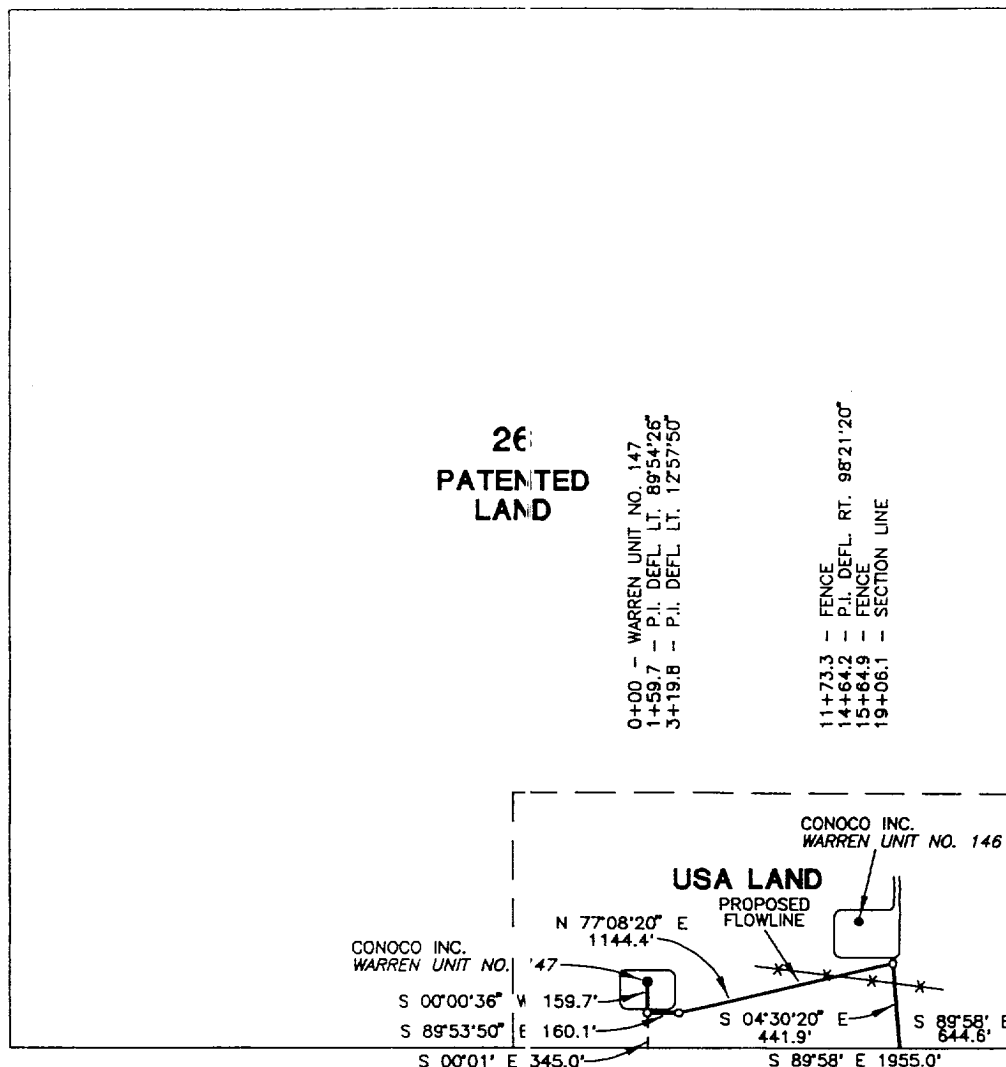
Scale: 1" = 1000'

WTC No. 45237

Drawn By: R.S.

Sheet 2 of 2

SECTION 26, T-20-S, R-38-E, N.M.P.M.,
LEA COUNTY, NEW MEXICO



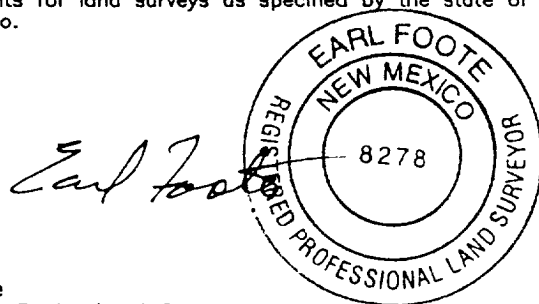
CENTERLINE DESCRIPTION OF A PROPOSED FLOWLINE:

BEGINNING at Conoco Inc. WARREN UNIT NO. 147, from which point the southeast corner of Section 26, T-20-S, R-38-E, N.M.P.M., Lea County, New Mexico, bears S 00° 01' E, 345.0 feet and S 89° 58' E, 1955.0 feet;

THENCE with the centerline of proposed flowline as follows: S 00° 00' 36" W, 159.7 feet; S 89° 53' 50" E, 160.1 feet; N 77° 08' 20" E, 1144.4 feet and S 04° 30' 20" E, 441.9 feet to a point in the South Line of said Section 26, for the end of this line, from which point the southeast corner of said Section 26 bears S 89° 58' E, 644.6 feet.

**PROPOSED FLOWLINE TO SERVE
WARREN UNIT NO. 147**

I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.



Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278

CONOCO INC.

1906.1 feet of proposed flowline in
Section 26, T-20-S, R-38-E, N.M.P.M.,
Lea County, New Mexico

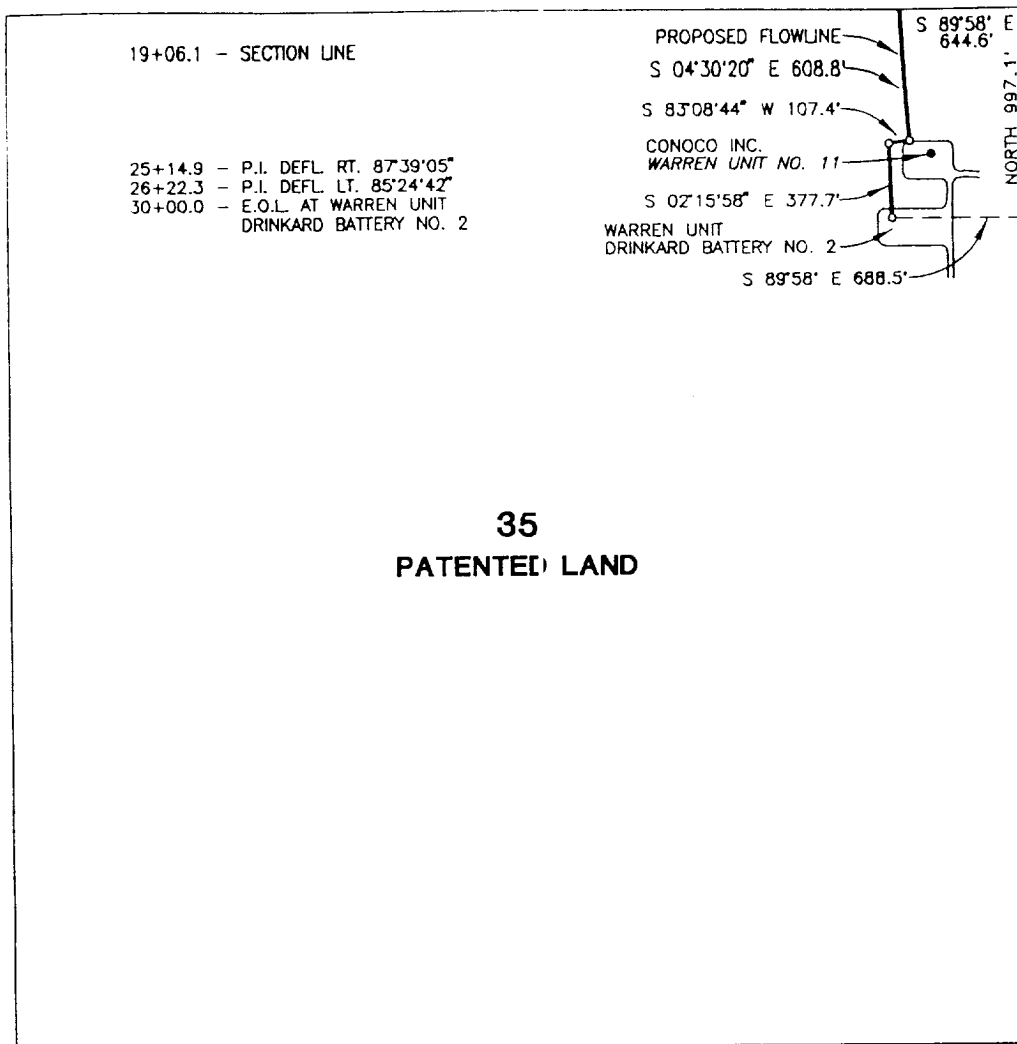
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

Survey Date: 4-13-98	Date: 4-21-98	Scale: 1" = 1000'
WTC No. 45237	Drawn By: R.S.	Sheet 1 of 2

SECTION 35, T20S, R38E, N.M.P.M.
LEA COUNTY, NEW MEXICO



CENTERLINE DESCRIPTION OF A PROPOSED FLOWLINE:

BEGINNING at a point in the North Line of Section 35, T-20-S, R-38-E, N.M.P.M., Lea County, New Mexico, from which point the northeast corner of said Section 35 bears S 89° 58' E, 644.6 feet;

THENCE with the centerline of proposed flowline as follows: S 04° 30' 20" E, 608.8 feet; S 83° 08' 44" W, 107.4 feet and S 02° 15' 58" E, 377.7 feet to a point at WARREN UNIT DRINKARD BATTERY NO. 2, for the end of this line, from which point the northeast corner of said Section 35 bears S 89° 58' E, 688.5 feet and North 997.1 feet.

PROPOSED FLOWLINE TO SERVE
WARREN UNIT NO. 147

CONOCO INC.

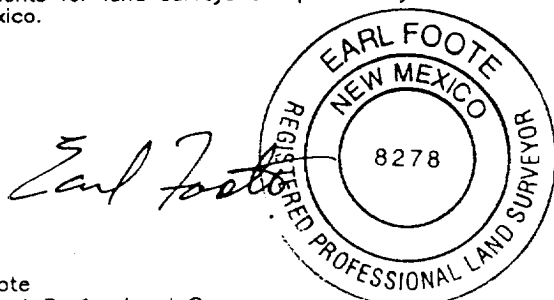
1093.9 feet of proposed flowline in
Section 35, T-20-S, R-38-E, N.M.P.M.,
Lea County, New Mexico

WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.



Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278

Survey Date: 4-13-98	Date: 4-21-98	Scale: 1" = 1000'
WTC No. 45237	Drawn By: R.S.	Sheet 2 of 2

PROPOSED WELL PLAN OUTLINE

WELL NAME: **Warren Unit No. 147**
 LOCATION: **345 FSL & 1955 FEL, Sec 26-T20S-R38E, Lea County, New Mexico**
 GL: 1564
 ALL DEPTHS ARE
 BELOW GROUND LEVEL

DEPTH	FORMATION	DRIILLING PROBLEMS & COMMENTS	FORMATION EVALUATION	HOLE SIZE	CASING PROGRAM	FRAC GRAD	FORMATION PRESSURE GRADIENT	MUD WEIGHT & TYPE	DAYS
		Possible hole enlargement and sloughing		12 1/4"				Spud	
					8-5/8", 23#, M-50 ST&C @ 1500'		Less than 8.3		1
	Rustler @ 1580'				600 sx, Circulate Cement				
	Top Salt @ 1670'	Washouts in Salt Section		7-7/8"				10 ppg Brine	2
							Less than 8.4		
	Ease Salt @ 2750'								
	Yates @ 2880'	Possible Deviation	No Mud Logs						
	7-Rivers @ 3150'								
	Queen @ 3710'		H2S Monitor on at 3500'						
	Penrose @ 3860'								
	Grayburg @ 4065'								
	San Andres @ 4337'	Possible losses and seepage to TD			Mud up with Gel-Starch if necessary to control losses.				
									7
	Glorieta @ 5560'	Cases of differential sticking through the Glorieta							
	Blinbry Mkr @ 6030'				Top Tail Cement @ 5700				
	Tubb Mkr @ 6500'								
	Drinkard @ 6800'								
	Abo @ 7050'		BPS to log well						
	TD @ 7250'		GR-CAL-CNL-FDC-MLL-D.L-PE		5-1/2", 17#, K-55, LT&C @ 7250'			Starch/salt gel	18
					1355 sx, Circulate Cement				

[Signature] 5/1/98
 Jim Tietema, Staff Engineer 14-Apr-98
[Signature] 5/1/98
 Mark Durkee, Production Engineer 14-Apr-98

[Signature] 5/1/98
 Joe Miller, Reservoir Engineer 14-Apr-98

Well Name : Warren Unit #147

Location : 345' FSL & 1955' FEL, Sec. 26, T20S, R38E, Lea Co., NM

Casing Program :

Surface 8 5/8" casing in 12 1/4" Hole at 1500 ft.

Production 5 1/2" casing in 7 7/8" Hole at 7250 ft.

Cementing Program :

Surface

Lead 400 sacks Class C
Additives 35:65:6 (Poz:Cem:Gel) + 2% CACL2
+ 0.25 pps Cello-Flake
Mixed at 12.7 ppg **Yield** 1.88 cuft/sk

Tail 200 sacks Class C
Additives 2% CACL2
Mixed at 14.8 ppg **Yield** 1.34 cuft/sk

Production

Lead 1005 sacks Class C
Additives 16% Gel + 0.4% CD-32 + 0.2% SMS
Mixed at 12 ppg **Yield** 2.69 cuft/sk

Tail 350 sacks Class C
Additives 1.1% FL-62 + 1% BA-58 + 3% Salt + 0.3% CD-32
+ 0.2% SMS
Mixed at 14.8 ppg **Yield** 1.37 cuft/sk
Free Water 0 % **Fluid Loss** 45 cc/30 min.

SURFACE USE PLAN

Conoco Inc.

Warren Unit 147

The following is required information concerning the possible effect which the drilling of this well may have on the environment, existing road sites, and surrounding acreage. A copy will be posted on the derrick floor so all contractors and sub-contractors will be aware of all items of this plan.

1. Existing Roads

A. The proposed well site is 345' FSL. & 1955' FEL, Sec. 26, T20S, R38E, Lea County, New Mexico.

B. Directions to the location are as follows:

Travel South of Hobbs on Hwy. 18 for 10.5 miles; turn east through cattleguard; travel .4 mile; turn north and travel .2 mile; turn east and travel .2 mile to location.

C. No improvement or maintenance is anticipated for the existing roads.

2. Planned Access Roads

A. 3720.6' of new access road will be required.

B. Turnouts as required by surface management agency.

C. Culverts as required by surface management agency.

D. Gates, cattleguards, or fences as required by surface management agency.

3. Topographic Map and Well Location

A 7.5" quadrangle topo map was filed with the NOS.

4. Additional Rights-of-Way

Access road and flowline as shown on attached plats.

5. Water Supply

Fresh and brine water will be obtained from Goldstar's Water Station located 1 mile north of Eunice, NM, on Loop 18 and will be trucked to location by the same directions for reaching the drilling site.

6. Source of Construction Materials

Construction materials will be obtained from the SE/4 NE/4, Sec. 16, T20S, R38E, Lea County, NM.

7. Methods of Handling Waste Disposal

- A. The drill cuttings, fluids and completion fluids will be placed in the reserve pit. The reserve pit will be fenced on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves out. The reserve pit will be allowed to dry, and materials remaining in the reserve pit buried. The reserve pit will be backfilled, leveled and contoured so as to prevent any materials being carried into the watershed. Upon completion, the pad will be leveled, contoured, and reseeded with the appropriate seed mixture as specified by the surface managing agency.
- B. All garbage and trash will be hauled away to designated landfill by Conoco.
- C. Chemical toilets will be provided and maintained during drilling operations.

8. Ancillary Facilities

No ancillary facilities are planned.

9. Wellsite Layout

See attached Wellsite Layout. The V-door faces East. The reserve pit will be lined with plastic and the pad and pits are staked. All unguarded pits containing liquids will be fenced and any unguarded pit containing liquids will be fenced.

10. Plans for Restoration of Surface

Reserve pits will be rehabilitated once drilling fluids have been allowed to evaporate to the point the pits are dry enough for backfilling and leveling. In the event drilling fluids will not evaporate in a reasonable time period, the fluids will be removed and transported by tank truck to a state approved disposal facility. Backfilling and leveling of the location will be completed within a time period of one year upon cessation of drilling operations.

11. Surface Ownership

The surface ownership is USA, Robert A. McCasland and Dallas McCasland, G.P. Sims, et ux. and Will Terry Trust, et al.

12. Archeological Clearance

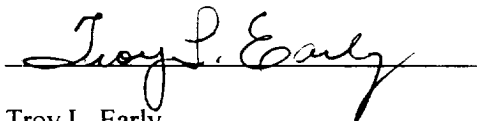
An archeological survey is being conducted and will be provided upon completion.

13. Operator's Representative and Certification

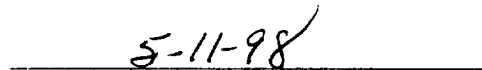
The person who can be contacted concerning compliance of this Surface Use Plan is:

Troy L. Early
10 Desta Drive, Suite 430E
Midland, Texas 79705
(915) 686-5579

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drilling site; that I am familiar with the conditions which current'y exist; that the statements made in this plan, are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Conoco Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.



Troy L. Early
Right-of-Way Agent



Date



WDI



H2S Safety Contractor



Cohoco Quarters



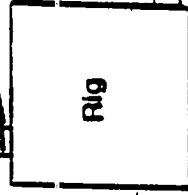
Muster Area No. 1



Contractor Quarters



WDI



Choke Manifold



Muster Area No. 2

WDI

Terrain is flat, and covered with native grass.
Two of the three WDI (wind direction indicator) locations will be utilized.
(Prevailing winds are SW to SE)

TRAILER - MOUNTED RIG LAYOUT

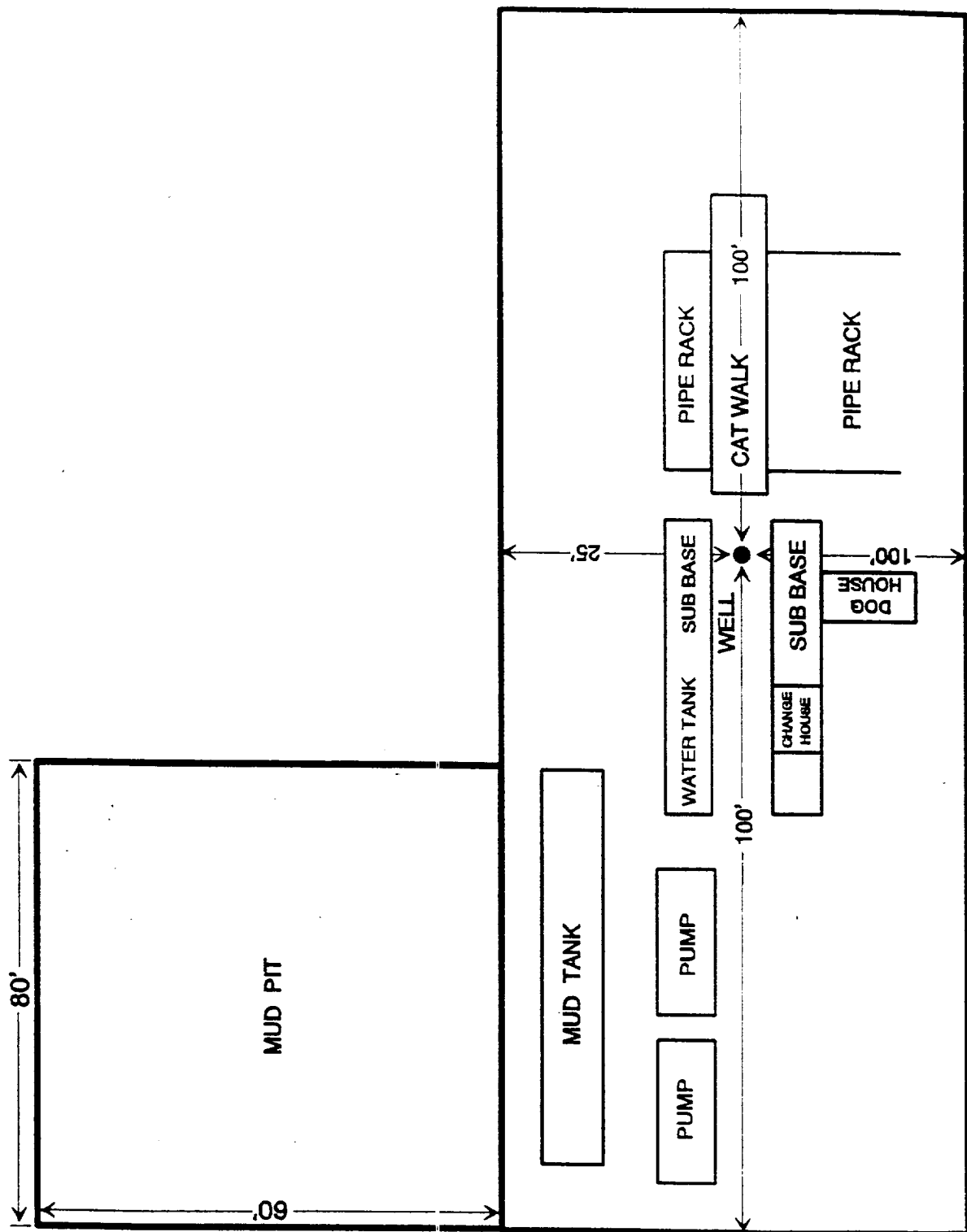
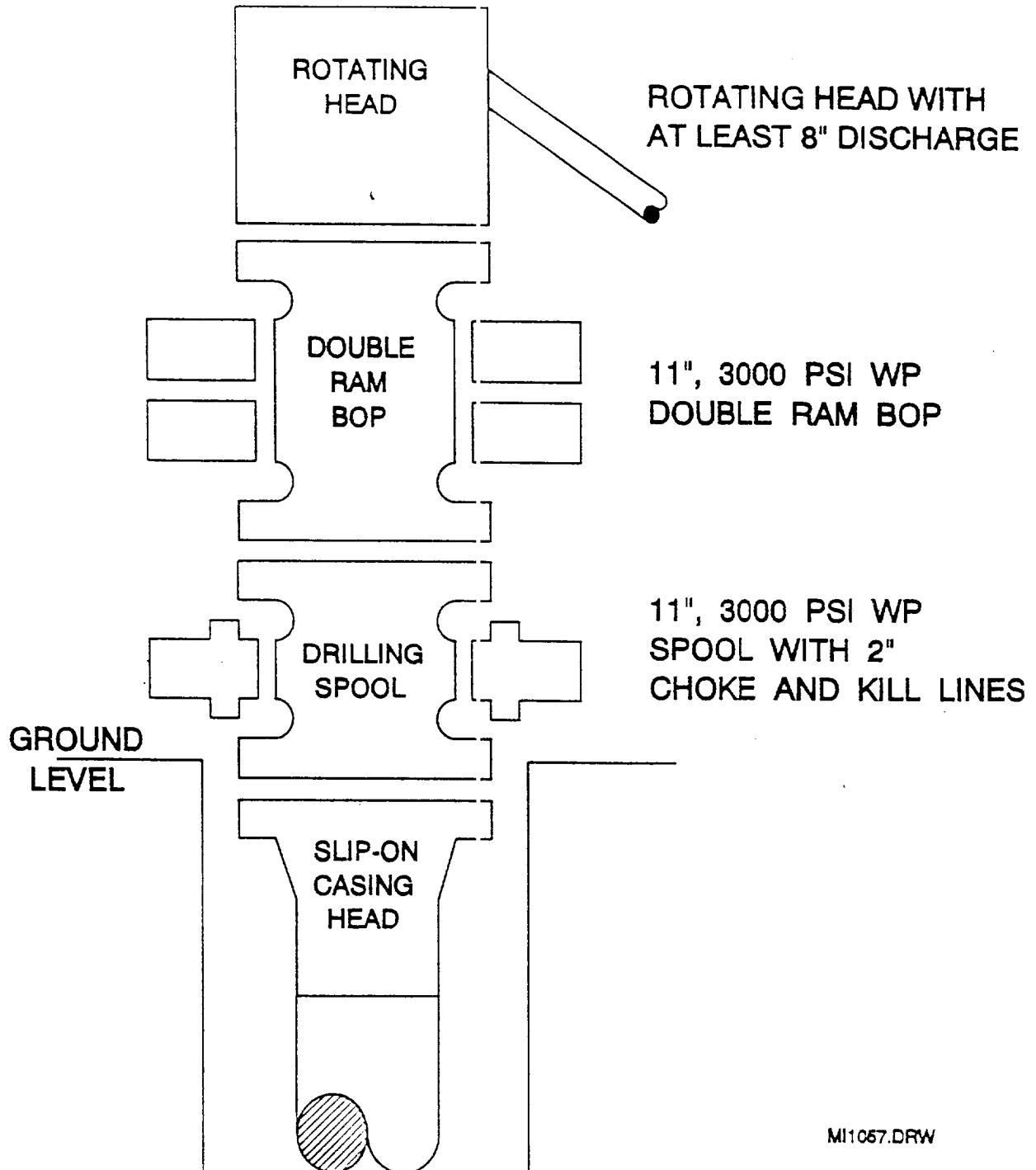


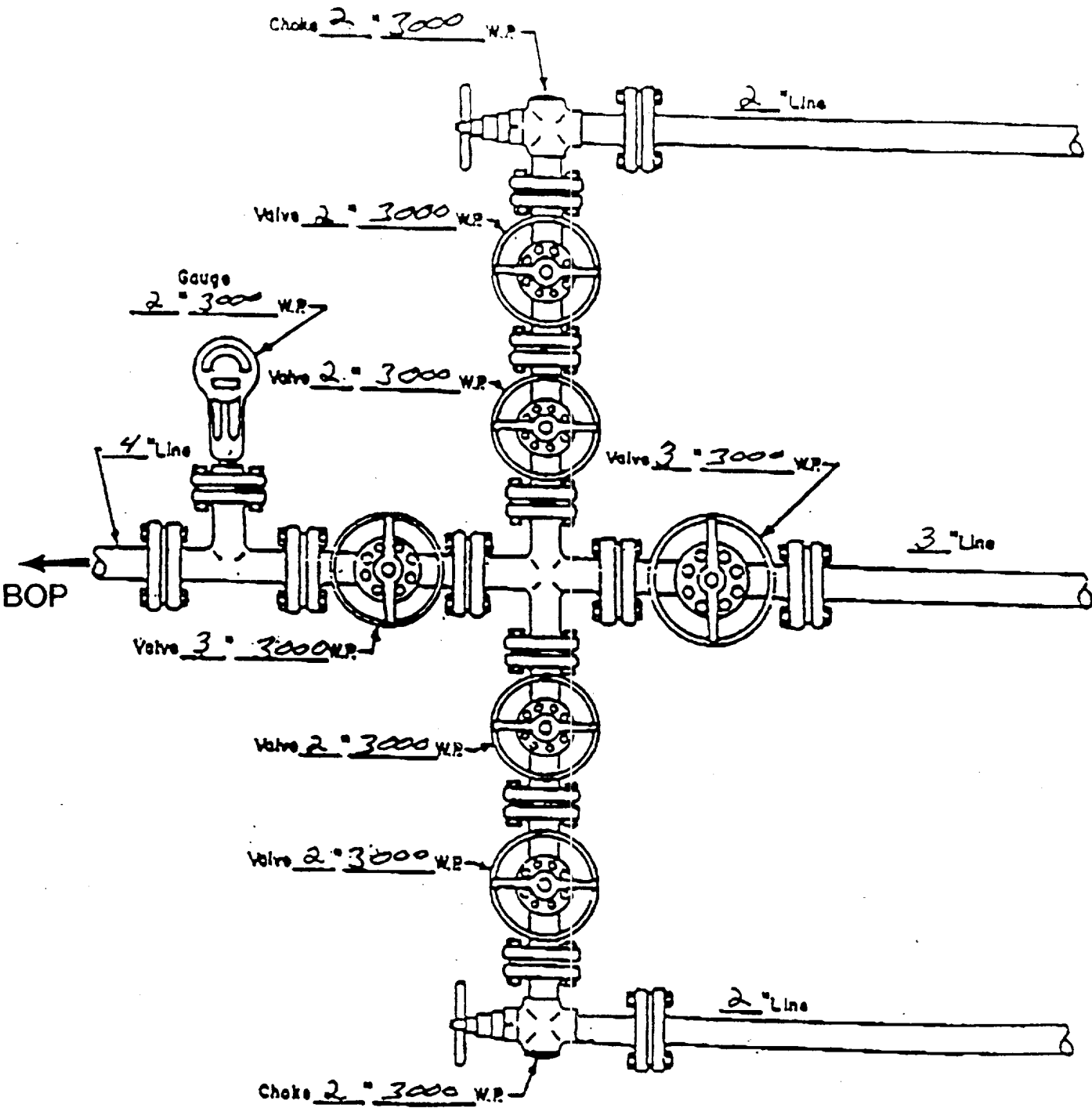
EXHIBIT D

BOP SPECIFICATIONS



MI1057.DRW

CHOKE MANIFOLD DIAGRAM



MANIFOLD
3000 #W.P.

- ☒ Manual
- ☐ Hydraulic

H2S DRILLING OPERATIONS PLAN

I. Hydrogen Sulfide Training

All contractors and subcontractors employed by Conoco will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H₂S)
2. Safety precautions
3. Operations of safety equipment and life support systems.

In addition, contractor supervisory personnel will be trained or prepared in the following areas:

1. The effect of H₂S on metal components in the system, especially high tensile strength tubulars are to be used.
2. Corrective action and shut-down procedures when drilling or reworking a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

All personnel will be required to carry documentation of the above training on their person.

II. H₂S EQUIPMENT AND SYSTEMS

1. Safety Equipment

The following safety equipment will be on location:

- A. Wind direction indicators as seen in attached diagram.
- B. Automatic H₂S detection alarm equipment (both audio and visual).
- C. Clearly visible warning signs as seen on the attached diagram. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the dog house and at briefing areas as seen in the attached diagram.

2. Well Control Systems

A. Blowout Prevention Equipment

Equipment includes but is not limited to:

- a. pipe rams to accommodate all pipe sizes
- b. blind rams
- c. choke manifold
- d. closing unit
- e. flare line and means of ignition

B. Communication

The rig contractor will be required to have two-way communication capability. Conoco will have either land-line or mobile telephone capabilities.

C. Mud Program

The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers when appropriate will minimize hazards when penetrating H₂S bearing zones.

D. Drill Stem Tests

There are no drill stem tests proposed for this well.

III. WELL SITE DIAGRAM

A complete well site diagram including the following information is attached:

1. Rig orientation
2. Terrain
3. Briefing areas
4. Ingress and egress
5. Pits and flare lines
6. Caution and danger signs
7. Wind indicators and prevailing wind direction

Jo Ann Johnson
Property Analyst
Right of Way and Claims

Conoco Inc.
10 Desta Drive, Suite 430E
Midland, Texas 79705-4500
(915) 686-5515

May 8, 1998

Bureau of Land Management
620 E. Greene
Carlsbad, New Mexico 88221

Attn: Barry Hunt, Surface Protection Specialist

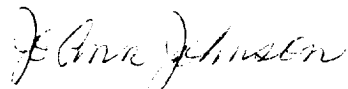
Re: Settlement for Well Location and Appurtenances
WARREN UNIT Well #147
Section 26, T20S, R38E
Lea County, New Mexico

Dear Mr. Hunt:

By this letter Conoco Inc. has made settlement with surface owner for the construction of the above referenced location and appurtenances.

If you have questions, please contact me at 915-686-5515.

Sincerely,



Jo Ann Johnson