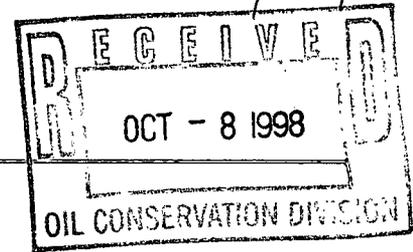


**BURLINGTON  
RESOURCES**

MID-CONTINENT DIVISION

October 5, 1998

Mr. Michael E. Stogner  
Energy, Minerals and Natural Resources Dept.  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505-5472



RE: Proposed Horizontal Gas Well  
Standard Surface Location  
\*Non-Standard Sub-Surface Vertical Bottom Hole Location  
Due to Possible Bit Drift Tendency to the West

---

Burlington Resources Oil & Gas Company, OGRID #26485  
BR "13" Federal #1  
Ross Draw Wolfcamp Gas Pool, Pool Code 84330  
Surf. Loc.: SW/4 NW/4, UL-E, 1834' FNL & 665' FWL  
Section 13, T26S, R30E, Eddy County, New Mexico  
Lse. #NM 94610

Dear Mr. Stogner:

Burlington Resources Oil & Gas Company desires administrative approval for a non-standard gas producing area/sub-surface bottom hole gas well location for the vertical portion of the wellbore for this proposed new drill well, pursuant to Division General Rule 104.F and 111.C(2) to be applicable to the Ross Draw Wolfcamp (Gas) Pool for the BR "13" Federal #1, located at a standard surface location SW/4 NW/4, 1834' FNL & 665' FWL, (Unit E) of Section 13, T26S, R30E, Eddy County, New Mexico.

The surface location is restricted to these footages due to a pipeline which run through this section.

The W/2 of said Section 13, being a standard 320-acre gas spacing and proration unit for this interval, is to be dedicated to said well.

Burlington Resources requests approval for an unorthodox vertical bottom hole location due to possible bit drift tendency to the west. A buffer zone has been picked for the vertical bottom hole location of 1834' FNL & 500' FWL, UL-E, Section 13, T26S, R30E, Eddy Co., New Mexico

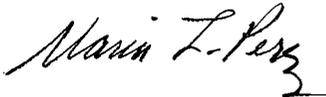
Enclosed is a copy of the federal application for permit to drill. Burlington Resources Oil & Gas Co. is the only affected offset to the northwest corner, west and southwest corner of this 320 acre proration unit on which sides the sub-surface vertical bottom hole location extension of the producing window encroaches on.

The applicable drilling window or "producing area" within the Ross Draw Wolfcamp Gas Pool for said wellbore, shall include that area within the subject 320-acre spacing and proration unit comprising of the W2 of said Section 13 that is:

- (a) no closer than 660 feet to the East & West boundary of said 320-acre unit;
- (b) no closer than 1650 feet from the North and South Lines of said Section 13.

Burlington Resources will comply with all provision of Division General Rule 111 applicable in this matter. Please call me if you require additional information on this application.

Sincerely,



Maria L. Perez  
Regulatory Representative  
A/C 915-688-6906

cc: New Mexico Oil Conservation Division – Artesia  
U. S. Bureau of Land Management – Roswell

DISTRICT I  
P. O. Box 1980  
Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals, and Natural Resources Department

Form C-102  
Revised 02-10-94  
Instructions on back

DISTRICT II  
P. O. Drawer DD  
Artesia, NM 88211-0719

**OIL CONSERVATION DIVISION**  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Submit to the Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

DISTRICT III  
1000 Rio Brazos Rd.  
Aztec, NM 87410

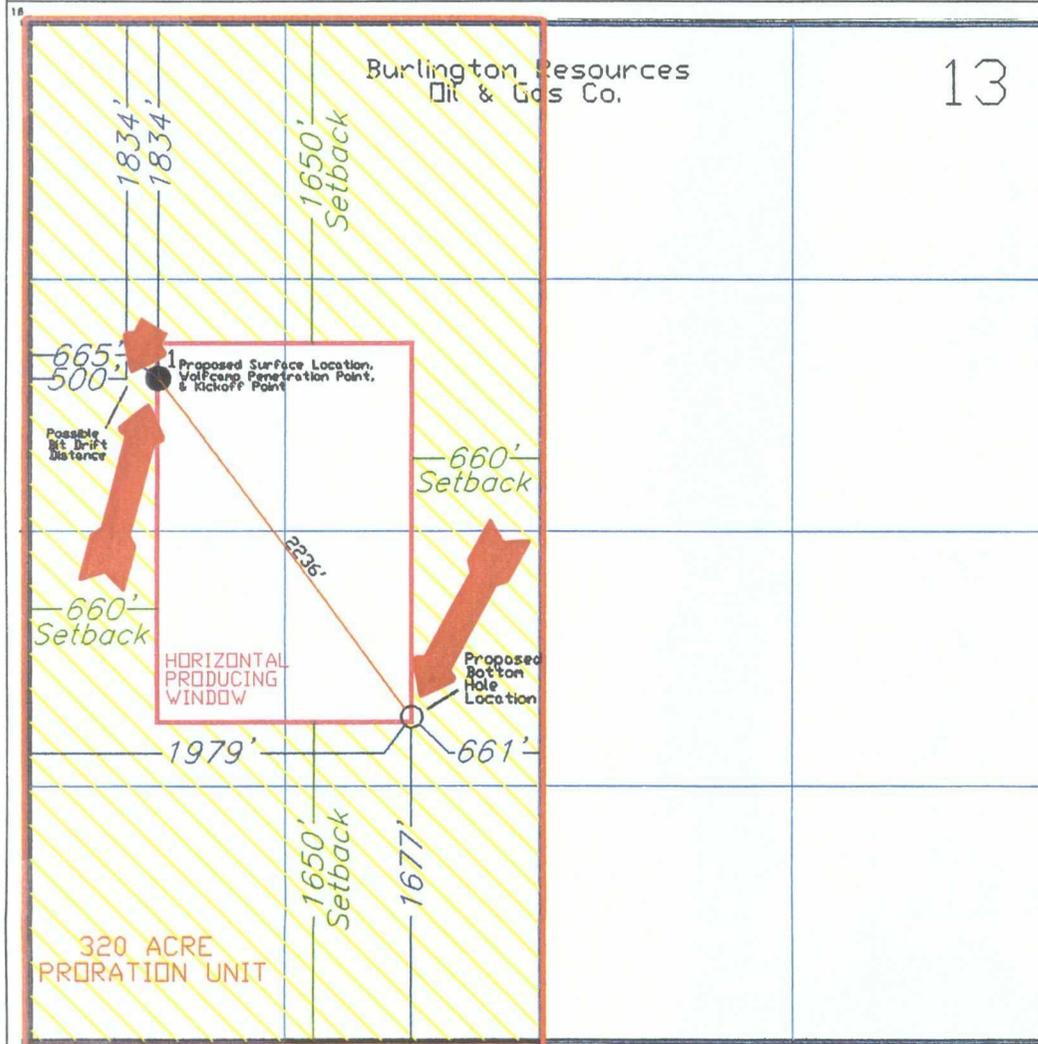
AMENDED REPORT

DISTRICT IV  
P. O. Box 2088  
Santa Fe, NM 87507-2088

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1 API Number		2 Pool Code 84330		3 Pool Name ROSS DRAW WOLFCAMP GAS					
4 Property Code		5 Property Name BR "13" FEDERAL						6 Well Number 1	
7 OGRID No. 26485		8 Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY						9 Elevation 3196'	
10 SURFACE LOCATION									
UL or lot no. E	Section 13	Township 26 SOUTH	Range 30 EAST, N.M.P.M.	Lot Ida	Feet from the 1834'	North/South line NORTH	Feet from the 665'	East/West line WEST	County EDDY
11 BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE									
UL or lot no. K	Section 13	Township 26 SOUTH	Range 30 EAST, N.M.P.M.	Lot Ida	Feet from the 1677	North/South line SOUTH	Feet from the 1979	East/West line WEST	County EDDY
12 Dedicated Acres 320		13 Joint or Infill		14 Consolidation Code		15 Order No.			

NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



**OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *Maria L. Perez*  
Printed Name: **Maria L. Perez**  
Title: **Regulatory Representative**  
Date: **10-5-98**

**SURVEYOR CERTIFICATION**

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 the best of my belief.

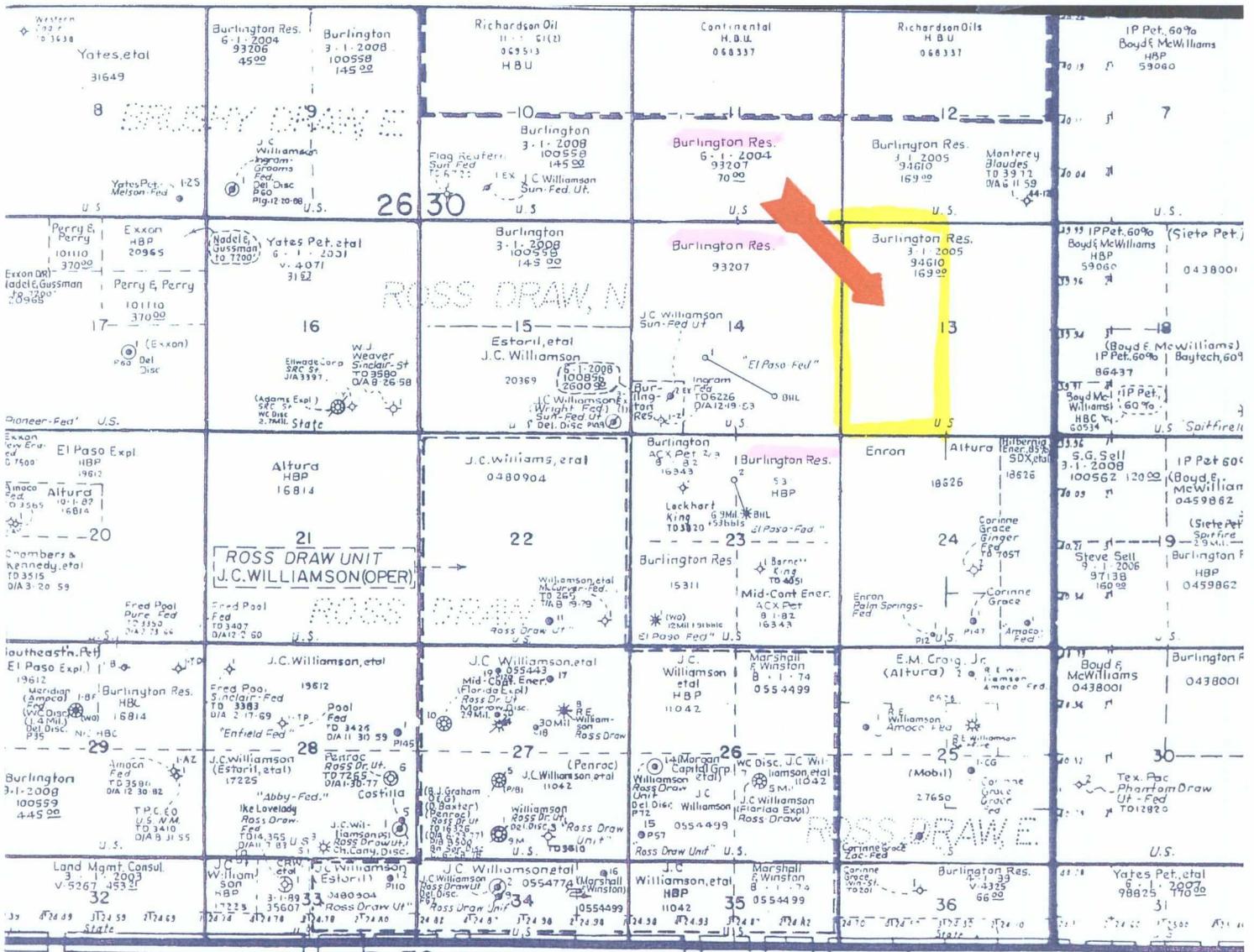
Date of Survey: **AUGUST 10, 1998**  
Signature and Seal of Professional Surveyor: *Roger M. Robbins*  
Professional Surveyor Seal: **REGISTERED SURVEYOR 12128**  
Certificate No.: **ROGER M. ROBBINS P.S. #12128**  
JOB #60344 / 23 SE / V.H.B.

Proposed Location: Burlington Resources Oil & Gas Company  
**El Paso 14 Federal #2**

Surface Location  
 UL-E, 1834' FNL & 665' FWL  
 SW/4 of the NW/4 of Section 13, T26S, R30E  
 Eddy County, New Mexico  
 Lse. #NM94610

**EXHIBIT C**

Horizontal Well  
 Proposed Bottom Hole Location  
 UL-K, 1' 1677' FSL & 1808' FWL  
 NE/4 of the SW/4 of Section 13, T26S, R30E  
 Eddy County, New Mexico  
 Lse. #NM94610



LOVING County

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM94610
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER HORIZONTAL WELL <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR BURLINGTON RESOURCES OIL & GAS COMPANY		7. UNIT AGREEMENT NAME
3. ADDRESS AND TELEPHONE NO. P.O. Box 51810 Midland, TX 79710-1810      915-688-9012		8. FARM OR LEASE NAME, WELL NO. BR 13 Federal #1
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. *) At surface E. 1834' FNL & 665' FWL - SURFACE LOCATION At proposed prod. zone K, 1677' FSL & 1979' FWL - BHL (SEE ATTACHED PLAT)		9. API WELL NO.
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 53 MILES W/SW FROM JAL		10. FIELD AND POOL, OR WILDCAT ROSS DRAW WOLFCAMP GAS
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 661' BHL (SEE PLAT)	16. NO. OF ACRES IN LEASE 320	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 13, T26S, R30E
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	19. PROPOSED DEPTH 14,475' MD	12. COUNTY OR PARISH EDDY
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3196' GR      12,430' TVD	20. ROTARY OR CABLE TOOLS ROTARY	13. STATE NM
22. APPROX. DATE WORK WILL START* DECEMBER 15, 1998		

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8" H-40 STC	48#	400'	365 SXS, CIRCULATE CMT TO SURFACE
12-1/4"	9-5/8" K-55 LTC	36#	3800'	1270 SXS, CIRCULATE CMT TO SURFACE
8-3/4"	7" P-110 LTC	26#	11,900'	1280 SXS, TOC +/- 3400'
6-1/8"	4-1/2" P-110 HDL	15.1# LINER	11,600' TO TD	NO CMT

HORIZONTAL WELL

NOT IN POTASH AREA

REQUESTING SUB-SURFACE UNORTHODOX BOTTOM HOLE LOCATION FOR VERTICAL PORTION OF HOLE. HORIZONTAL BOTTOM HOLE LOCATION IS A STANDARD LOCATION. SEE PLAT ATTACHED. APPLICATION FOR AN UNORTHODOX LOCATION HAS BEEN SUBMITTED TO THE OCD IN SANTA FE.

ROW BEING SUBMITTED TO BUILD 2400' OF LEASE ROAD. INVOLVES TWO LEASE NUMBERS

WILL BE UTILIZING 9.6 MILES OF EXISTING BLM OWNED LEASE ROAD TO ACCESS LEASE (SEE EXHIBIT A).

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 Maria L. Perez TITLE REGULATORY REPRESENTATIVE DATE 10-5-98

(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:

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

**\*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.

<b>OPERATORS NAME:</b>	<b>Burlington Resources Oil &amp; Gas Company</b>
<b>LEASE NAME AND WELL NO.:</b>	<b>BR 13 Federal #1</b>
<b>LOCATION:</b>	<b>UL-E, 1834' FNL &amp; 665' FWL, Sec. 13, T26S, R30E</b>
<b>FIELD NAME:</b>	<b>Ross Draw Wolfcamp Gas</b>
<b>COUNTY:</b>	<b>Eddy County, New Mexico</b>
<b>LEASE NUMBER:</b>	<b>NM 94610</b>

The following information is to supplement BLM form 3160-3 Application for permit to drill in accordance with Onshore Oil and Gas Order No. 1:

**9-POINT DRILLING PLAN**  
**Horizontal Well**

1. Name and estimated tops of important geologic formation/marker horizons.

<u>FORMATION</u>	<u>DEPTH</u>	
Rustler	Surface	SS, Dol, Anhy
Salado	900'	Salt & Anhy
Castille	3,600'	Anhy & Salt
Delaware	3,800'	SS, Shale, LS
Bone Springs	7,750'	SS, Shale, LS
Wolfcamp	11,030'	Shale, LS
Wolfcamp "A"	12,360'	Limestone

2. Estimated depths at which the top and bottom of formations potentially containing usable water, oil, gas, or prospectively valuable deposits of other minerals are expected to be encountered and the operator's plans for protecting such resources.

Wolfcamp	11,030'
Wolfcamp "A" Limestone	12,360'

OTHER ZONES:

Delaware	3,800'
Bone Springs	7,750'

3. The operator's minimum specifications for Blowout Preventer (BOP) and related equipment to be used and schematic diagrams thereof showing sizes, pressure ratings, and the testing procedures and testing frequency. BOP and BOP - related equipment (BOPE) schematics shall include schematics of choke manifold equipment. Accumulator systems and remote controls shall be utilized.

#### **Surface Csg**

Install 13-3/8" SOW x 13-5/8" 3M psi WP casing head with 36" base plat.  
Nipple up 13-5/8" 1500 psi WP annular preventer w/rotating head.  
Test the 13-3/8" casing to 500 psi using rig pump and hold for 30 minutes.

#### **Intermediate Csg**

Install 13-5/8" 3M psi WP x 11" 5M psi WP casing spool. Nipple up 11" 5M x 13-5/8" 5M DSA. NU 13-5/8" 5M psi WP BOP's including annular w/rotating head. (API RP53 Fig 2.C.5 SRRAG). Test ram BOP's and choke manifold to 250 psi and 3,000 psi, test annular BOP to 250 psi and 1,500 psi utilizing a test plug and an independent tester..

#### **Production Csg**

Install 11" 5M psi x 7-1/16" 10M psi tbg head. Test head to 4,350 psi (70 % x Casing Pc of 6,230) or the wellhead manufacturer's recommendation, whichever is less. NU 7-1/16" 10M psi WP BOP's including annular w/rotating head (API RP53 fig 2.C.9 RSRRAG). Test ram BOP's and choke manifold to 250 psi and 10,000 psi, test annular BOP to 250 psi and 3,500 psi utilizing a test plug and an independent tester.

4. The proposed casing program including size, grade, weights, type of thread and coupling, and the setting depth of each string and its condition (new or acceptably reconditioned). For exploratory wells, or for wells as otherwise specified by the authorized officer, the operator shall include the minimum design factors for tensions, burst, and collapse that are incorporated into the casing design. In cases where tapered casing strings are utilized, the operator shall also include the setting depths of each portion.

#### **CASING:**

17-1/2" hole Set 13-3/8", 48#, H-40, STC csg @ 400'

12-1/4" hole Set 9-5/8", 36#, K-55, LTC csg @ 3800'

8-3/4" hole Set 7", 26#, P-110, LTC, csg @ 11,900'

6-1/8" Pilot Hole to Vertical Total Depth of 12,500'

Plug Back to Kick-off Point @  $\pm 12,074'$

Target Azimuth = 144 Degrees

Final Inclination = 87.95 Degrees

Total Vertical Section = 2235'

Total Depth = 14,475' MD, 12,430' TVD

Run 4-1/2" 15.1# P-110 HDL Liner. Hang off in 7" casing with mechanical liner hanger. (Top of liner @ +/- 11,600', Bottom of Liner @ TD).

5. The amount and type(s) of cement, including anticipated additives to be used in setting each casing string, shall be described. If stage cementing techniques are to be employed, the setting depth of the stage collars and amount and type of cement, including additives, and preflush amounts to be used in each stage, shall be given. The expected linear fill-up of each cemented string, or each stage when utilizing stage-cementing techniques, shall also be given.

- a.) Surface Hole (17-1/2" X 13 3/8" csg):

**Lead:** Cmt w/265 sxs Class "C" + 4% Gel + 2% CaCl<sub>2</sub> + .25 pps Flocele.

**Tail:** Cmt w/100 sxs Class "C" + 2% Cacl<sub>2</sub> + .25 pps Flocele.

(Circulate cement to surface).

- b.) Intermediate Hole (12-1/4" X 9 5/8" csg): **Two Stage** (DV Tool @  $\pm 2000'$ )

**First Stage:**

**Lead:** Cmt w/300 sxs Interfill "C" + 5 pps Gilsonite + .25 pps Flocele.

**Tail:** Cmt w/300 sxs Class "C" + 1% CaCl<sub>2</sub>.

**Second Stage:**

**Lead:** Cmt w/570 sxs Interfill "C" + 5 pps Gilsonite + .25 pps Flocele.

**Tail:** Cmt w/100 sxs Class "C" + 1% CaCl<sub>2</sub>.

(Circulate cement to surface)

c.) Production Hole (8-3/4" hole X 7" csg): **Two Stage** (DV Tool @ ± 7000')

**First Stage:**

**Lead:** Cmt w/580 sxs Interfill "H" + 5 pps Gilsonite (LCM) + 0.2% HR-5 (Retarder).

**Tail:** Cmt w/200 sxs Class "H" + 0.3% Halad-322 (Fluid Loss), 0.4% Halad-9 (Fluid Loss) + 0.3% Super CBL (Gas Check).

**Second Stage:**

**Lead:** Cmt w/400 sxs Interfill "H" + 5 pps Gilsonite (LCM), .25 pps Flocele.

**Tail:** Cmt w/100 sxs Class "H".

TOC @ ± 3400' (inside 9-5/8").

d.) Plugback Cement

+/- 150 sxs Class "H" + .8% CFR-3 (Dispersant), .5 % Halad-344 (Fluid Loss), .2% Super CBL (Gas Check), . 2% HR-5 (Retarder)

6. The anticipated characteristics, additives, use, and testing of drilling mud to be employed, along with the types and quantities of mud products to be maintained, shall be given. When air or gas drilling is proposed, the operator shall submit the following specific information:

**Mud Program:**

0-400': fresh water, gel, and lime system, MW 8.9 - 9.3 ppg.

400'-3800': brine, MW 10.0 - 10.2 ppg

3800'-11,900': cut brine mud MW 9.0 - 9.3 ppg

11,900'-14,475' (6-1/8" Pilot Hole & Lateral Section): weighted water base mud MW 10.0 - 15.0 ppg.

7. The anticipated testing, logging, and coring procedures to be used, including drill stem testing procedures, equipment, and safety measures.
  - a. DST Program: None Planned
  - b. Core: None Planned
  - c. Mud Logging: 3000' to TD
  - d. Logs to be run: Halliburton  
CNL/LDT, DIL/SFL, GR, CAL, BHC above 7"  
CNL/LDT, DLL/MSFL, GR, CAL, BHC, CAST below 7"  
Last log in lateral, GR Neutron while tripping in lateral.
8. The expected bottom-hole pressure and any anticipated abnormal pressures, temperatures or potential hazards that are expected to be encountered, such as lost circulation zones and hydrogen sulfide. The operator's plans for mitigating such hazards shall be discussed. Should the potential to encounter hydrogen sulfide exist, the mitigation procedures shall comply with the provisions of Onshore Oil and Gas Order No. 6.

Potential for abnormal pressure exists from the top of the Wolfcamp to TD.  
Bottom hole  
pressures at TD is estimated at 9150 psi. Bottom hole temperature 205 F. There is  
no anticipated Hydrogen Sulfide in this known drilling area. .

9. Any other facets of the proposed operation which the operator wishes for BLM to consider in reviewing the application.

Anticipated time expected to do this work is 72 days. (Horizontal Well)

## 12-POINT SURFACE USE PLAN OF OPERATIONS

Burlington Resources Oil & Gas Company

BR 13 Federal #1

E,1834' FNL & 665' FWL, Sec. 13, T26S, R30E

Ross Draw Wolfcamp Gas Field

Eddy County, New Mexico NM

Lse. #NM 94610

1. **Existing Roads:** A legible map (USGS topographic, county road, or other such map) labeled and showing the access route to the location, shall be used for locating the proposed well site in relation to a town, village, or other locatable point, such as a highway or county road. All access roads shall be appropriately labeled. Any plans for improvement and/or maintenance of existing roads shall be provided. All roads shall be provided. All roads shall be improved or maintained in a condition the same as or better than before operations. The information provided for use and construction of roads will also be used by BLM for the required Plan of Development for a R/W application as described in Section II C of this Order No. 1.

See Exhibit "A" - topographic land surveyors plat showing existing roads.  
Several other plats are enclosed showing the directions to the location.

2. **Access Roads to be Constructed or Reconstructed:** All permanent and temporary access roads to be constructed or reconstructed in connection with the drilling of the proposed well shall be appropriately identified and submitted on a map or plat. The proposed route to the proposed drill site shall be shown, including distances from the point where the access route exists established roads. All permanent and temporary access roads shall be located and designed to implement the goals of transportation planning and meet applicable standards of the appropriate SMA, and shall be consistent with the needs of the users. Final selection of the route location may be accepted by the SMA as early as the predrill inspection or during approval of the APD.

See Exhibit "B" plat shows 2400' of proposed lease road to be constructed.  
ROW will be filed for proposed lease road. Involves 2 lease numbers.

3. **Location of Existing Wells:** This information shall be submitted on a map or plat, which includes all recorded wells (water, injection, or disposal, producing, or being drilled) within a 1-mile radius of the proposed location.

See Exhibit "C" - portion of land map showing surrounding wells in area.

4. **Location of existing and/or proposed production facilities:** For facilities planned either on or off the well pad, a plat or diagram shall be included showing, to the extent known or anticipated, the location of all production facilities and lines to be installed if the well is successfully completed for production. If new construction is planned, the dimensions of the facility layouts are to be shown. This information for off-pad production facilities may be used by BLM for R/W application information as specified in Section II C of Order No. 1.

Production facilities will be built at location.

5. **Location of Types of Water Supply:** Information concerning water supply, such as rivers, creeks, springs, lakes, ponds, and wells, may be shown by quarter-quarter section on a map or plat, or may be described in writing. The source and transportation method for all water to be used in drilling the proposed well shall be noted if the source is located on Federal or Indian Lands or if water is to be used from a Federal or Indian project. If the water is obtained from other than Federal or Indian lands, the location and transportation method shall be identified. Any access roads crossing Federal or Indian lands that are needed to haul the water shall be described as provided in paragraphs (1) and (2) of this Section. If a water supply well is to be drilled on the lease, the APD shall so state. The authorized officer of BLM may require the filing of a separate APD of a water well.

No available surface or sub-surface fresh water exists in the vicinity of the proposed well. Drilling water will be transported or pumped to the drill site from the nearest commercial source.

6. **Construction Materials:** The operator shall state the character and intended use of all construction material, such as sand, gravel, stone, and soil material. If the materials to be used are Federally owned, the proposed source shall be shown either on a quarter-quarter section on a map or plat, or in a written description.

Caliche will be obtained from well site.

**Methods of Handling Waste Disposal:** A written description of the methods and locations proposed for safe containment and disposal of each type of waste material (e.g. cuttings, garbage, salts, chemicals, sewage, etc.) that results from the drilling and completion of the proposed well shall be provided.

- Drill cuttings - disposed into drilling pits.
- Drill fluids - allowed to evaporate in drill pits until pits dry.
- Produced water during testing - drill pits.
- Produced oil during testing - storage tank until sold.
- Current laws and regulations pertaining to disposal of human waste will be observed.
- Reserve pit will be plastic lined.

- Waste paper, garbage, and junk will be disposed of into a special container on location and removed regularly to an approved landfill site. All waste material will be covered with a screen or lid and contained to prevent scattering by wind.
- All trash and debris will be removed from well site within 30 days after drilling and/or completion operations are finished.

8. **Ancillary Facilities:** All ancillary facilities such as camps and airstrips shall be identified on a map or plat. Information as to location, land area required, and methods to be used in construction shall also be provided.

No Ancillary Facilities are required.

9. **Well Site Layout:** A plat of suitable scale (not less than 1 inch = 50 feet) showing the proposed drill pad, reserve pit location, access road entry points, and its approximate location with respect to topographic features, along with cross section diagrams of the drill pad and the reserve pit showing all cuts and fills and the relation to topography. The plat shall also include the approximate proposed location and orientation of the drilling rig, dikes and ditches to be constructed, and topsoil and/or spoil material stockpiles.

See Exhibit "D". Sketch for the well pad .

10. **Plans for Reclamation of the Surface:** A proposed interim plan for reclamation stabilization of the site and also final reclamation plan shall be provided. The interim portion of the plan shall cover areas of the drillpad not needed for production. The final portion of the plan shall cover final abandonment of the well. The plan shall include, as appropriate, configuration of the reshaped topography, drainage systems, segregation of spoil materials, surface manipulations, redistribution of topsoil, soil treatments, revegetation, and any other practices necessary to reclaim all disturbed areas, including any access roads and pipelines. An estimate of the time for commencement and completion of reclamation operations, including consideration of weather conditions and other local uses of the area, shall be provided.

- After completion of drilling and/or completion of operations, all equipment and other material not needed for operations will be removed. Pits will be filled and locations cleaned of trash and junk to leave well in as aesthetically pleasing a condition as possible.
- Any unguarded pits containing fluids will be fenced until filled.
- After abandonment of well, surface restoration will be in accordance with the Bureau of Land Management Surface Requirements.

11. **Surface Ownership:** The surface ownership (Federal, Indian, State or private) and administration (BLM, FS, BIA, Department of Defense, etc.) at the well location, and of all lands crossed by roads which are to be constructed or upgraded, shall be indicated. Where the surface of the proposed well site is privately owned, the operator shall provide the name, address and telephone number of the surface owner.

Bureau of Land Management  
620 E. Greene Street  
Carlsbad, New Mexico 88220

12. **Other Information:** Type of bond. The operator shall be covered by a bond in its own name as principal, or by a bond in the name of the lessee or sublessee.

Burlington Resources Oil & Gas is covered by a statewide bond.

**Operator's Representatives:**

Field representatives (Responsible for compliance with approved surface use operations plan.)

Burlington Resources Oil & Gas Company  
P.O. Box 837  
Hobbs, NM 88240  
Office: 505-393-5844

Mr. Ed Jackson, Sr. Drilling Foreman  
Artesia, NM  
Home: 505-746-6173  
Mobile: 505-746-7159

Mr. Frank Raybon, Drilling Foreman  
Eunice, NM  
Home: 505-394-2449  
Mobile: 505-369-5367

Jim Kramer, Sr. Staff Drilling Engineer  
P.O. Box 51810  
Midland, TX 79710-1810  
Office: 915-688-6843  
Home: 915-694-2499

Cash Smithwick, Drilling Superintendent  
P.O. Box 51810.  
Midland, TX 79710-1810  
Office: 915-688-9051  
Home: 915-685-7053  
Pager: 915-495-6173

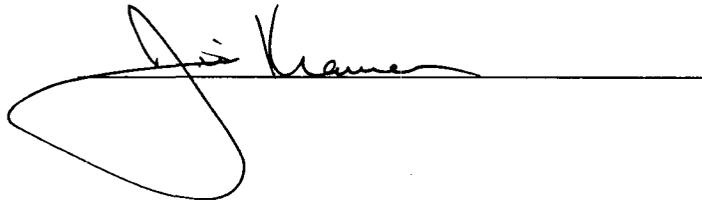
OPERATORS CERTIFICATION

I hereby certify that I, **Jim Kramer, Senior Staff Drilling Engineer**, under my direct supervision, have inspected the proposed drill site and access route that I am familiar with the conditions that currently exist; that the statements made in the APD package are, to the best of my knowledge, true and correct, and that the work associated with operations proposed herein will be performed by **not yet determined** contractors and subcontractors in conformity with this APD package and the terms and conditions under which it is approved. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application, with bond coverage being provided under BLM **statewide** bond. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

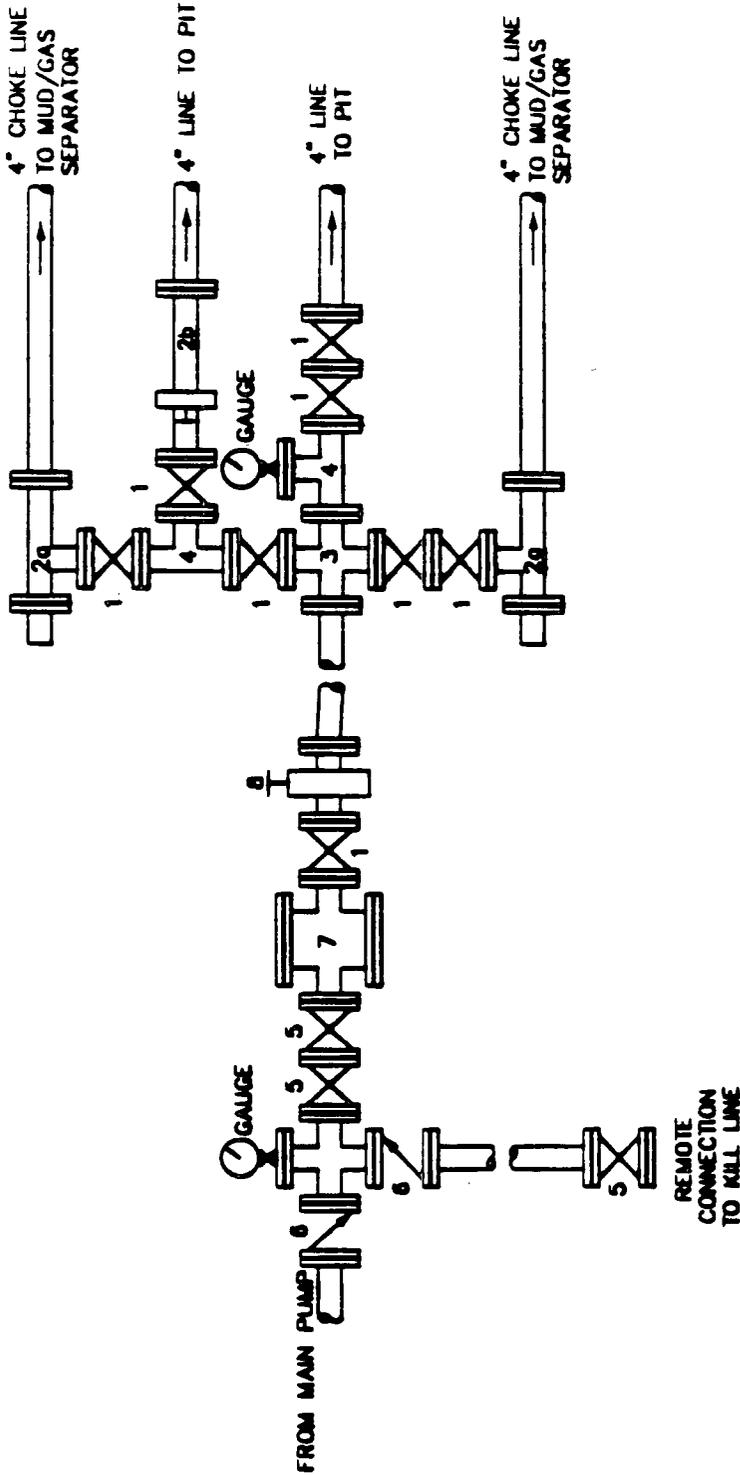
DATE: 10-5-98

NAME AND TITLE: Jim Kramer, Senior Staff Drilling Engineer

SIGNATURE:

A handwritten signature in black ink, appearing to read "Jim Kramer", is written over a horizontal line. The signature is stylized with a large, looping initial "J".

# CHOKE MANIFOLD SCHEMATIC



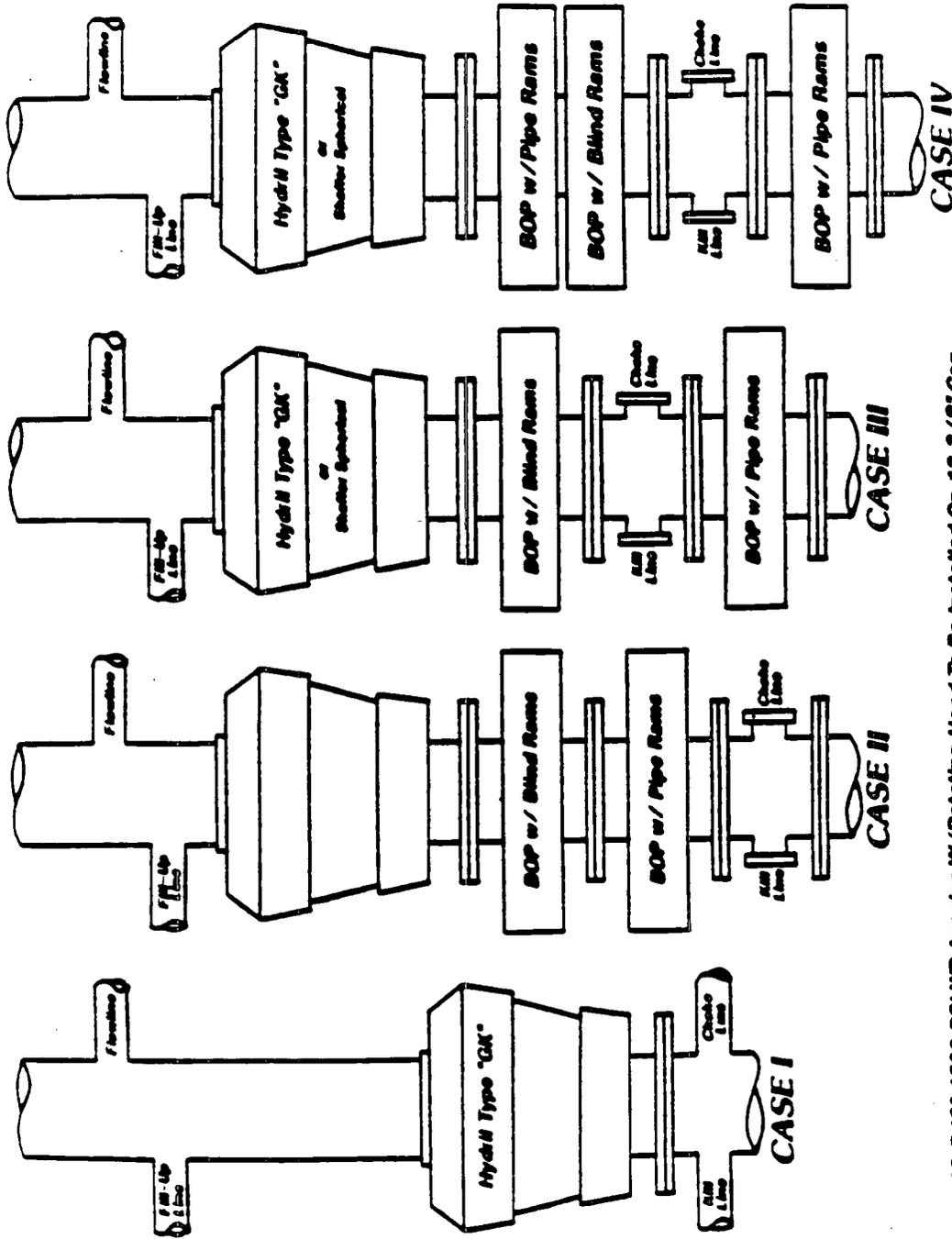
## LEGEND

1. 4" FLANGED ALL STEEL VALVE MUST BE EITHER CAMERON "F", HALLIBURTON LOW TORQUE, OR SHAFFER FLO-SEAL.
- 2a. 2 9/16" REMOTE OPERATED FLANGED CHOKE, FULL OPENING & EQUIPPED W/HARD TRIM.
- 2b. 2 9/16" MANUAL OPERATED FLANGED CHOKE, FULL OPENING & EQUIPPED W/HARD TRIM.
3. 4" x 4" FLANGED STEEL CROSS.
4. 4" FLANGED STEEL TEE.
5. 2" FLANGED ALL STEEL VALVE (TYPE AS IN #1).
6. 2" FLANGED CHECK VALVE.
7. DRILLING SPOOL W/2" x 4" FLANGED STEEL OUTLET.
8. 4" PRESSURE OPERATED GATE VALVE.

## NOTES

CHOKE MANIFOLD MAY BE LOCATED IN ANY CONVENIENT POSITION. USE ALL STEEL FITTINGS THROUGHOUT. MAKE 90° TURNS WITH BULL PLUGGED TEES ONLY. NO FIELD WELDING WILL BE PERMITTED ON ANY OF THE COMPONENTS OF THE CHOKE MANIFOLD AND RELATED EQUIPMENT UPSTREAM OF THE CHOKES. THE CHOKE SPOOL AND ALL LINES AND FITTINGS MUST BE AT LEAST EQUIVALENT TO THE TEST PRESSURE OF THE PREVENTERS REQUIRED. INDEPENDENT CLOSING CONTROL UNIT WITH CLEARLY MARKED CONTROLS TO BE LOCATED ON DERRICK FLOOR NEAR DRILLER'S POSITION.

# MINIMUM BLOWOUT PREVENTER REQUIREMENTS



CASE I: 13 5/8" 1500 PSI WP Annular W/Rotating Head To Be Installed On 13 3/8" Csg

CASE II: 11" 5M PSI Double Rams W/ 5M PSI Annular To Be Installed On 9 5/8" Csg

CASE III: 7 1/16" 10M PSI Double Ram (Pipe On Top) Above Drilling Spool

7 1/16" 10M PSI Single Ram Below Drilling Spool

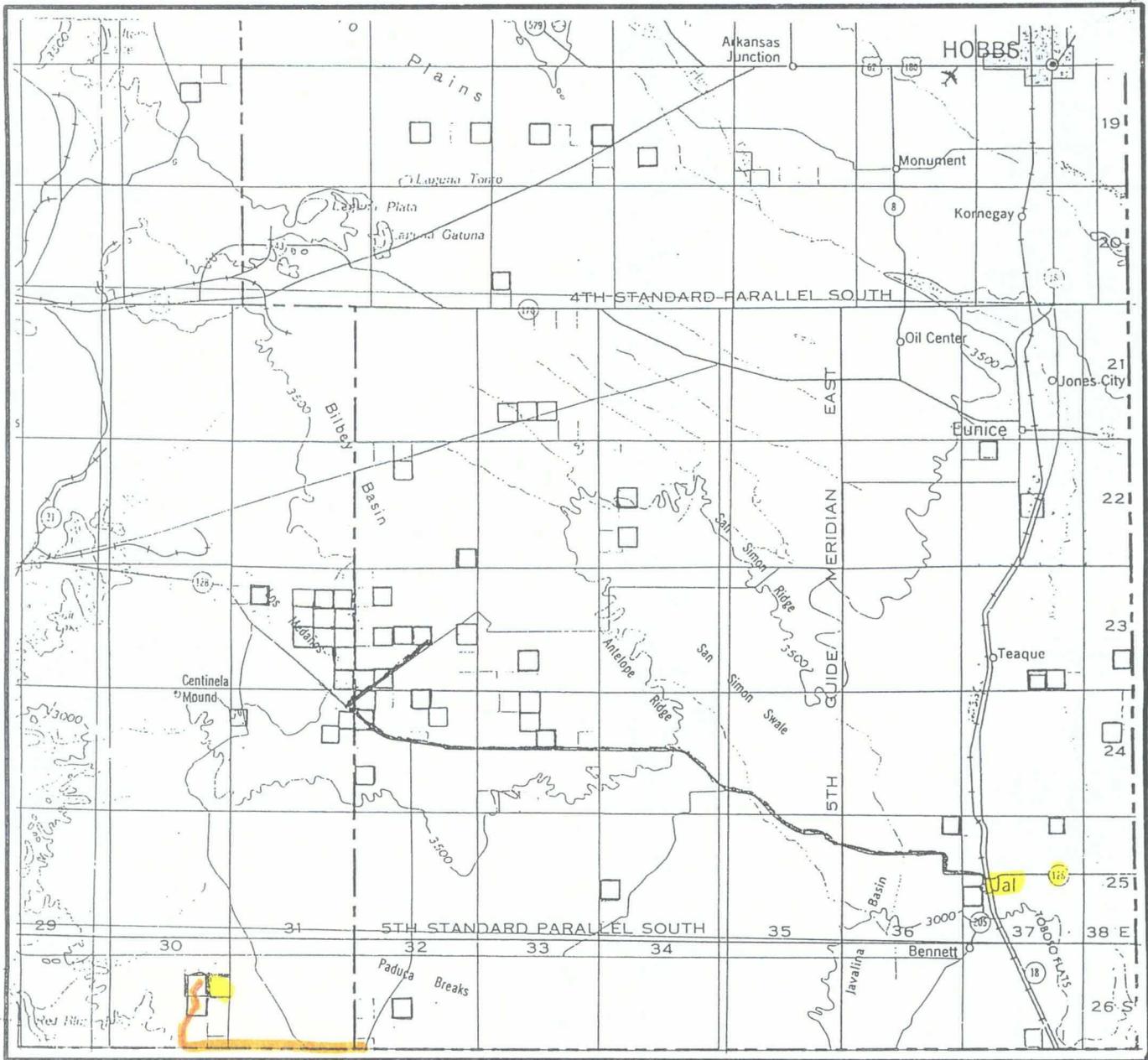
7 1/16" 5M PSI Annular W/Rotating Head

10M PSI Choke Manifold W/Remote Kill Line Connection

All To Be Installed On 7" Csg

# VICINITY MAP

EXHIBIT A



*9.6 miles BLM existing road*

SECTION 13 TWP 26-S RGE 30-E  
 SURVEY NEW MEXICO PRINCIPAL MERIDIAN  
 COUNTY EDDY STATE NM  
 DESCRIPTION 1834' FNL & 665' FWL

OPERATOR BURLINGTON RES. OIL & GAS CO.  
 LEASE BR "13" FEDERAL #1

DISTANCE & DIRECTION FROM JCT. OF STATE HWY. 128  
& CO. RD. C-1, ±30 MILES WEST OF JAL, GO SOUTH 15  
MILES ON CO. RD. C-1, THENCE WESTERLY 8.5 MILES ON  
STATE LINE RD., THENCE NORTHERLY 0.6 MILE ON LEASE  
RD., THENCE EASTERLY 0.5 MILE, THENCE NORTHEASTERLY  
1.3 MILES, THENCE NORTHWESTERLY 1.0 MILES ON LEASE  
ROAD, THENCE NORTHEASTERLY 0.6 MILES ON LEASE ROAD  
LEASE ROAD TO A POINT ±2400' WEST OF THE LOCATION.



This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plot and notify us immediately of any possible discrepancy.

## TOPOGRAPHIC LAND SURVEYORS

*Surveying & Mapping for the Oil & Gas Industry*

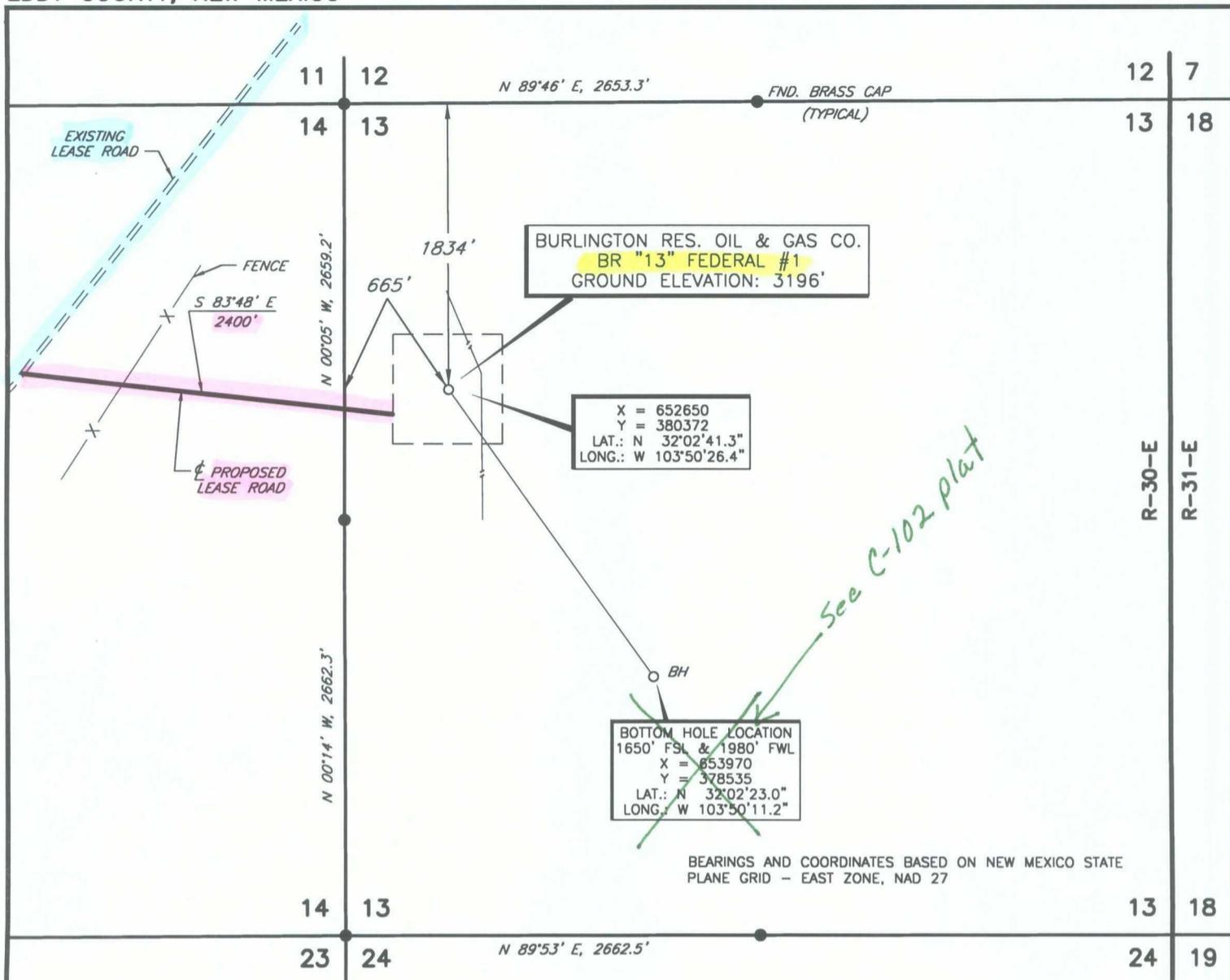
1307 N. HOBART  
 PAMPA, TX. 79065  
 (800) 658-6382

6709 N. CLASSEN BLVD.  
 OKLAHOMA CITY, OK. 73116  
 (800) 654-3219

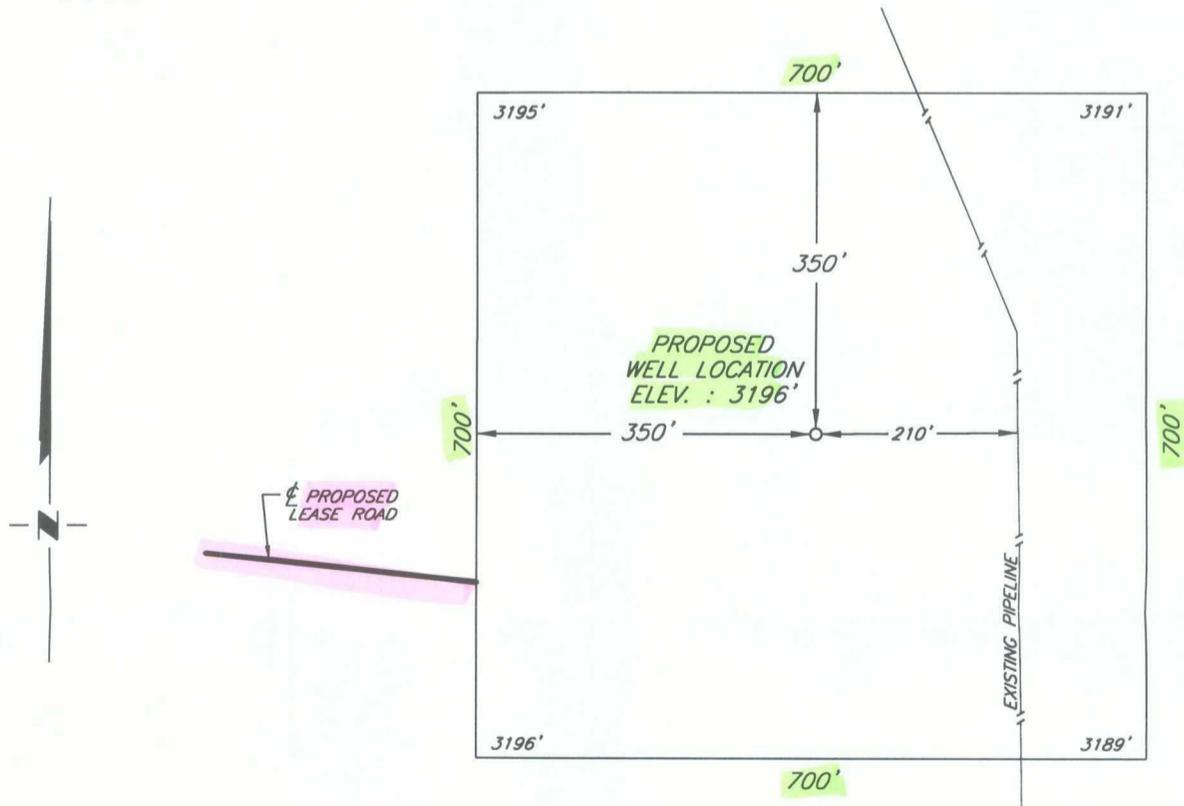
2903 N. BIG SPRING  
 MIDLAND, TX. 79705  
 (800) 767-1653

PLAT SHOWING PROPOSED  
WELL LOCATION AND LEASE ROAD IN  
SECTION 13, T-26-S, R-30-E, N.M.P.M.  
EDDY COUNTY, NEW MEXICO

EXHIBIT B



PLAN VIEW  
1" = 1000'



DETAIL VIEW  
1" = 200'

**BURLINGTON RESOURCES OIL & GAS CO.**

SCALE: AS SHOWN  
DATE: AUGUST 10, 1998  
JOB NO.: 60344-F

NO.	REVISION	DATE	BY

SURVEYED BY: R.M.R.  
DRAWN BY: V.H.B.  
APPROVED BY: R.M.R.

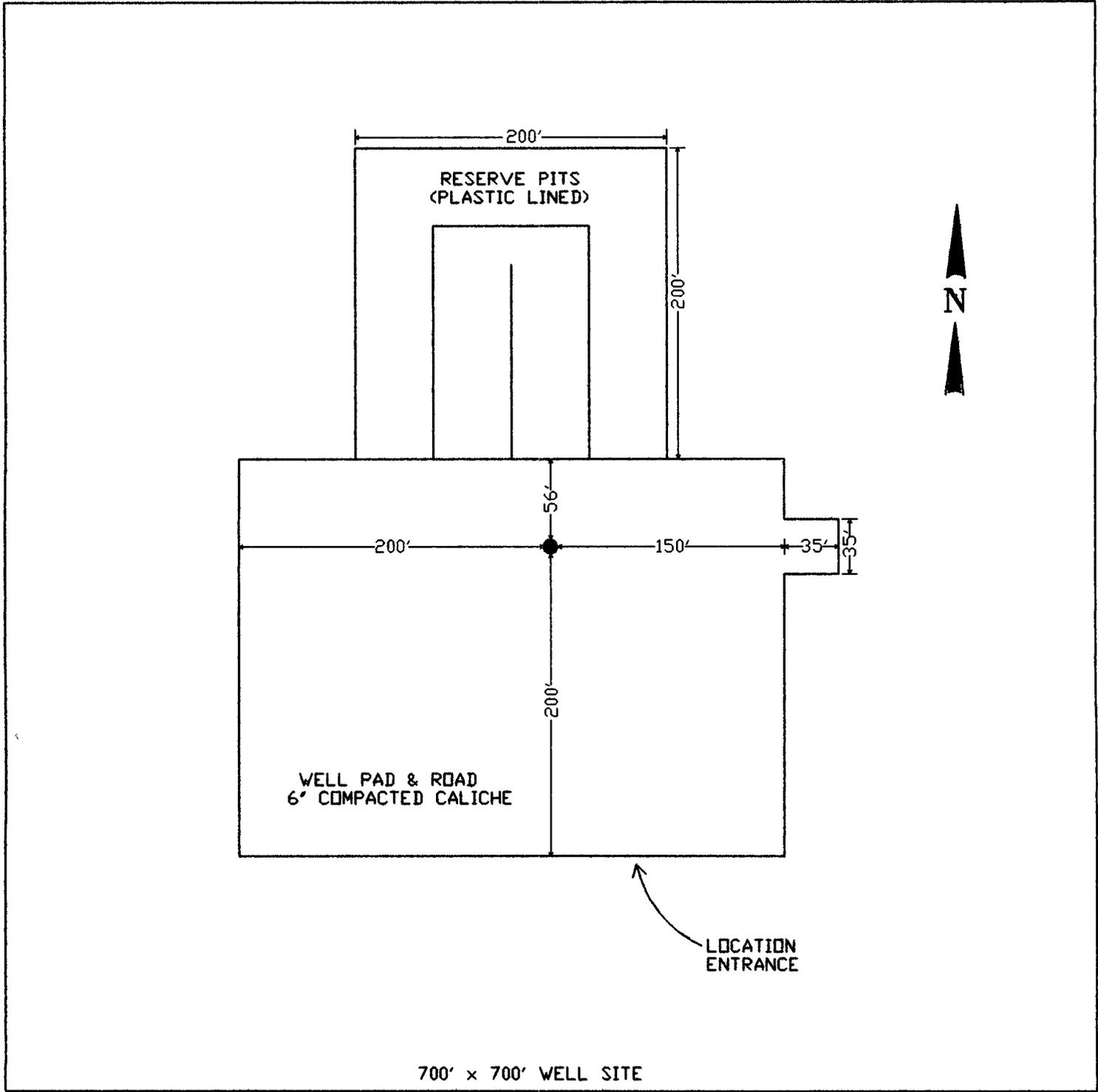
SURVEYING AND MAPPING BY  
**TOPOGRAPHIC LAND SURVEYORS**  
MIDLAND, TEXAS

QUAD NO.: 23 SE  
SHEET : 1 OF 1



EXHIBIT D

BURLINGTON RESOURCES OIL & GAS COMPANY  
MID-CONTINENT DIVISION  
DRILL WELL LOCATION SPECIFICATIONS  
BR 13 FEDERAL #1



700' x 700' WELL SITE

DWG#: LOCPLT

