



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
ROSWELL DISTRICT OFFICE
2909 West Second Street
Roswell, New Mexico 88202



IN REPLY REFER TO:

3162.4 (06200)
NM-15311

Burlington Resources Oil & Gas Company
Attn: Donna Williams
P. O. Box 51810
Midland, TX 79710-1810

JUL 31 1997

Dear Ms. Williams:

Your application for Permit to Drill (APD), the El Paso "23" Federal Well No. 2, 1120' FNL and 2630' FEL, Section 23, T. 26 S., R. 30 E., Eddy County, New Mexico, Lease No. NM-15311 was received on July 30, 1997.

The APD has been reviewed pursuant to part III.B.2 of Oil and Gas Onshore Order No. 1, except for the Archaeological Survey Report, and is found to be:

- Administratively complete
- Administratively deficient in the following items marked with an "X"
- Form 3160-3
 - Survey Plat
 - Bonding
 - Drilling Plan
 - BOP Diagram
 - Choke Manifold Diagram
 - H₂S Drilling Plan
 - Surface Use Plan (including certification statement)
 - Private Surface Owner's Agreement or Statement that an agreement has been reached concerning surface use
 - Other:

Please submit six (6) copies of each of the above noted deficiencies, except for the Archaeological Survey Report. Technical adequacy of the APD will be determined during processing and you will be contacted if additional information is required.

If you would like to know whether the Archeological Survey Report has been filed with the BLM, call Paul Evans in the Carlsbad Resource Area Office at (505) 887-6544.

Sincerely,

Tony L. Ferguson

Tony L. Ferguson
Assistant District Manager,
Minerals Support Team

BEFORE THE
OIL CONSERVATION COMMISSION
Case No. 11837 Exhibit No. **20**
Submitted By:
Burlington Resources
Hearing Date: August 21, 1997

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		3. LEASE DESIGNATION AND SERIAL NO. NM 15311	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <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 915-688-6943		8. FARM OR LEASE NAME, WELL NO. El Paso '23' # 2 Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1120' FNL & 2630' FEL At proposed prod. zone See Attached		9. API WELL NO. 30-015-29307	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 43 miles north/northwest of Jal. NM		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 drilg. unit line, if any) 1120'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 23, T26S, R30E	
16. NO. OF ACRES IN LEASE 320 proration unit		12. COUNTY OR PARISH Eddy	
17. NO. OF ACRES ASSIGNED TO THIS WELL 320		13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 3550'		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3101'		22. APPROX. DATE WORK WILL START* Upon Approval	

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"	48#	400'	390 SXS
12 1/4"	9 5/8"	36#	3900'	2215 SXS
8 3/4"	7"	26#	12,150'	1420 SXS

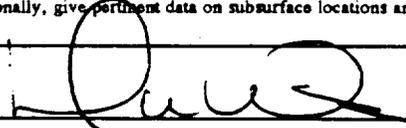
Not in Hydrogen Sulfide Area
Not in Designated Potash Area

Vertical APD was approved 12/17/96. Location was 1980' FNL & 2310' FEL
Well has been changed to a dual lateral and moved to another location.

320 acre proration unit deemed a "horizontal project area"

Contact person: Donna Williams. 915-688-6943

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  TITLE Regulatory Compliance DATE 7/28/97

(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.

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

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

Form 3-92
 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
 30 Rio Brazos Rd.
 Aztec, NM 87410

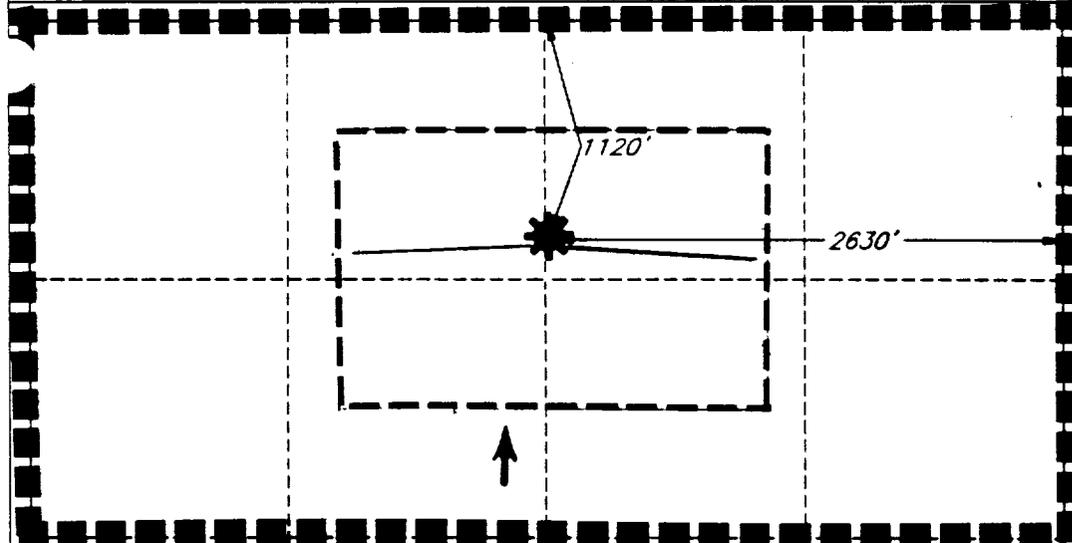
AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-015-29307		2 Pool Code 84330		3 Pool Name Ross Draw Wolfcamp (Gas)					
4 Property Code 14828		5 Property Name EL PASO 23 FEDERAL (ALT.)						6 Well Number 2	
7 OGRID No. 26485		8 Operator Name BURLINGTON RESOURCES OIL & GAS CO.						9 Elevation 3101'	
10 SURFACE LOCATION									
UL or lot no. b	Section 23	Township 28 SOUTH	Range 30 EAST, N.M.P.M.	Lot Ida	Feet from the 1120'	North/South line NORTH	Feet from the 2630'	East/West line EAST	County EDDY
11 BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE									
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres		13 Joint or Infill		14 Consolidation Code		15 Order No.			
HORIZONTAL PROJECT AREA									

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
 Donna Williams
 Printed Name
 Regulatory Compliance
 Title
 7/28/97
 Date

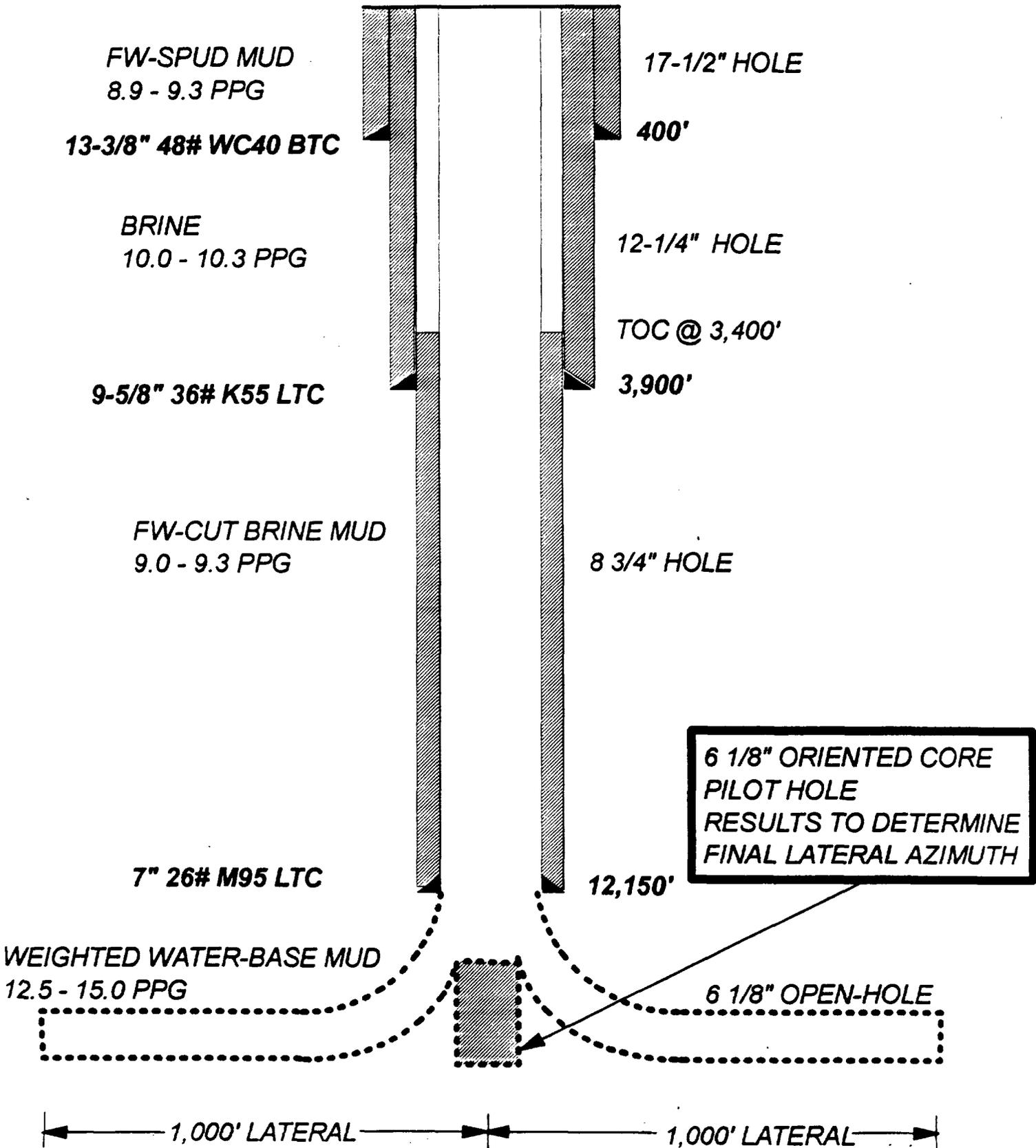
SURVEYOR CERTIFICATION
 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Dual lateral well in a 320 acre proration unit and horizontal project area. Each lateral is approximately 1000' in length and will remain within the producing area and remain orthodox as prescribed by the field and/or statewide rules which are applicable.

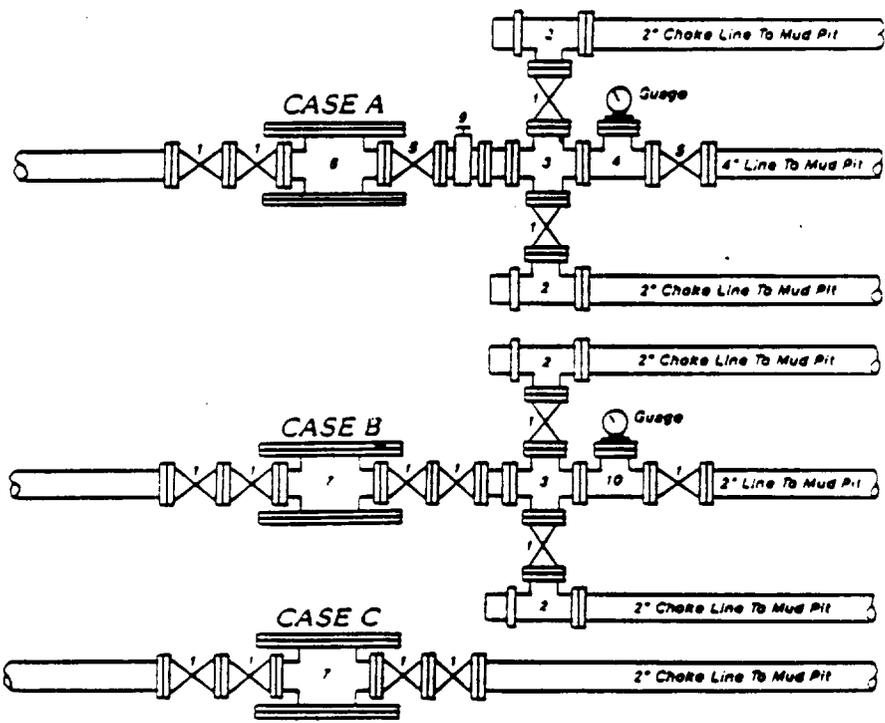
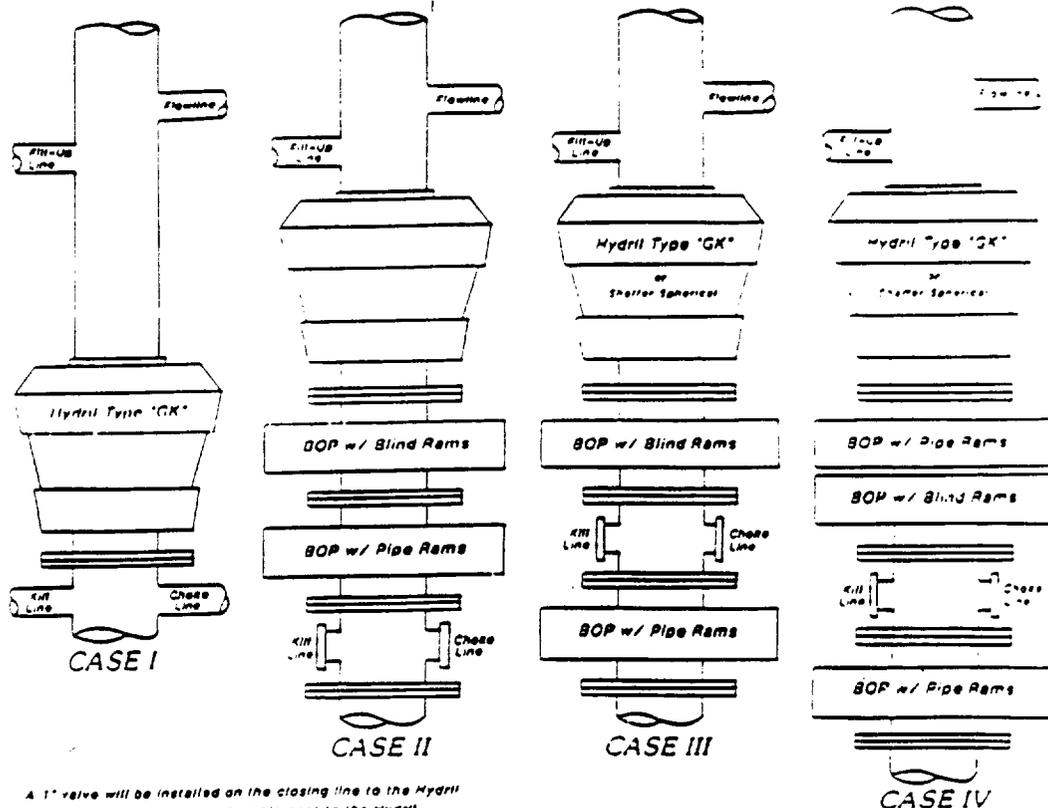
Date of Survey
 JULY 14, 1997

Signature
 Professional Surveyor
 ROGER ROBBINS
 REGISTERS
 12128
 CERTIFIED PROFESSIONAL SURVEYOR
 #12128
 JOB #52944 / 23 SE / JSJ

EL PASO FEDERAL 23 No. 2
Sec. 23, Blk 50, T26S, R30E
ROSS DRAW (WOLFCAMP) FIELD
EDDY COUNTY, NEW MEXICO
WELLBORE DIAGRAM



ATTACHMENT '1'
MINIMUM BLOWOUT PREVENTER REQUIREMENTS



Legend

1. 2" flanged oil steel valve must be either Cameron "E" Heilburton Low Torque, or Shaffer Flo-Seal.
2. 2" flanged adjustable shears, max. 1" full opening & equipped w/ hard trim.
3. 4" x 2" flanged steel cross.
4. 4" flanged steel tee.
5. 4" flanged oil steel valve (Type as in no. 1).
6. Drilling spool w/ 2" x 4" flanged steel outlet.
7. Drilling spool w/ 2" x 2" flanged outlet.
8. 2" x 2" flanged steel cross.
9. 4" pressure operated gate valve.
10. 2" flanged steel tee.

Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with dull 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.

OPERATORS NAME:	Burlington Resources Oil & Gas Company
LEASE NAME AND WELL NO.:	El Paso '23' Federal Well No. 2
LOCATION:	1120' FNL & 2630' FEL, Sec. 23, T26S, R30E
FIELD NAME:	Ross Draw Wolfcamp (Gas)
COUNTY:	Eddy County, New Mexico
LEASE NUMBER:	NM 15311

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

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

<u>FORMATION</u>	<u>DEPTH</u>
Delaware	3630'
Bone Spring	7480'
Wolfcamp	10,750'
Wolfcamp Detrital	12,060'

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	10,750'
Wolfcamp Detrital	12,060'

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.

13 5/8" BOP stack to be installed on the 13 3/8" & 9 5/8" csg. strings. The BOP will consist to one blind ram BOP, one pipe ram BOP, and a rotating had. Tested to 5000 psi/10,000 psi wp.

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 and/or setting depths of each portion.

CASING:

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

12 1/4" hole, 9 5/8" 36# K-55 LTC csg, set @ 3900'

8 3/4" hole, 7" 26# LTC csg, set @ 12,150'

OPEN HOLE LATERAL(S):

The lateral azimuth will be determined from core fracture. The two 1000' short radius laterals are proposed to be 180' apart. Will have a maximum 1.6 zone dip.

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.

CEMENT:

- a. 13 3/8" csg: Cmted w/390 sxs Premium Plus + 2% . Circ. to surface.
- b. 9 5/8" csg: Cmted w/lead-1915 sxs Haliburton Light Premium Plus + 1/4 pps flocele + 6 pps salt, tail w/300 sxs Premium Plus. Circ. to surface

- c. 7" csg: Cmt w/lead-1070 sxs Haliburton Light Premium Plus + .2% HR-4 + .6% Halad-344, tail w/350 sxs Light Premium Plus.

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 8.6-9.3 ppg

400'-3900': brine, MW 10.0-10.3 ppg

3900'-12,150': fresh water, cut brine mud MW 9.0-9.3 ppg

Open hole lateral(s): weighted water base mud MW 12.5-15.0 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
- b. Core: Possible whole core in the Wolfcamp Detrital
- c. Mud Logging: Two man unit 3900' to TD
- d. Logs to be run: Comp. Neutron/DDL/Micro-SFL

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 was an estimated 9150 psi. Bottom hole temperature 205 F. There is no anticipated Hydrogen Sulfide in this known drilling area. No abnormal pressures are anticipated.*

* Mud weight adequate to control the pressure encountered will be maintained. Drilling personnel will be trained in well control and BOPE equipment utilized at all times.

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

Anticipated time expected to be 45 days.

12-POINT SURFACE USE PLAN OF OPERATIONS

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 and directions to well site.

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 for road to be constructed and description.

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.

All production facilities will be on this location.

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.

Will try to use Caliche from reserve pit. If unable to use Caliche from reserve pit, then will get Caliche from a Federal or State approved caliche pit.

7. **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.

0 Information unavailable at this time.

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"

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, Drilling Foreman
Loco Hills, NM
Home: 505-677-2323
Mobil: 505-365-7206

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

Les Sinclair, Drilling Engr.
P.O. Box 51810
Midland, TX 79710-1810
Office: 915-688-6855
Home: 915-685-3254

Hal Lee, Drilling Superintendent
P.O. Box 51810.
Midland, TX 79710-1810
Office: 915-688-6834
Home: 915-685-6073

OPERATORS CERTIFICATION

I hereby certify that I, **Les Sinclair, 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:

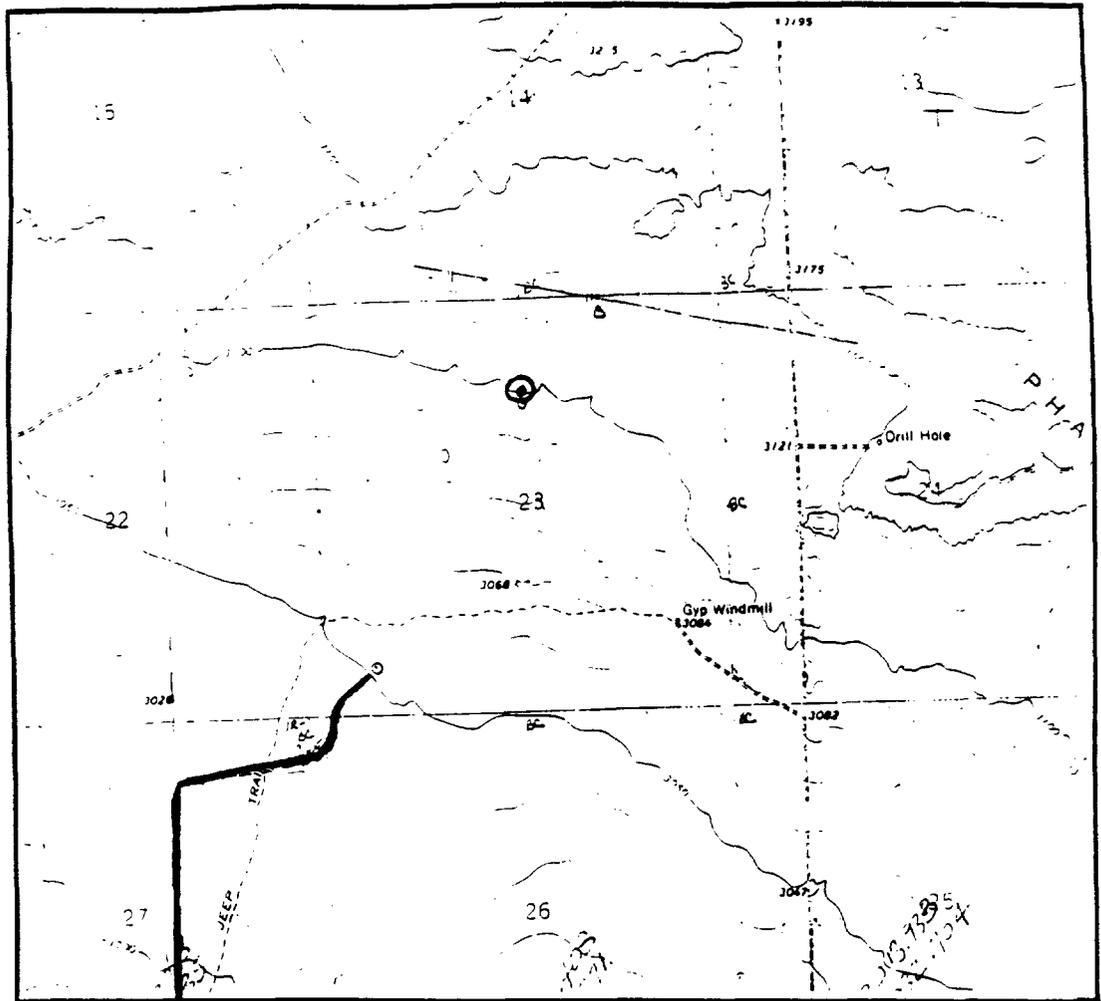
7/29/97

NAME AND TITLE: Les Sinclair, Drilling Engineer

SIGNATURE:

 _____

LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10'

SECTION 23 TWP 26-S RGE 30-E
 SURVEY NEW MEXICO PRINCIPAL MERIDIAN
 COUNTY EDDY STATE NM
 DESCRIPTION 1120' FNL & 2630' FEL
 ELEVATION 3101'

OPERATOR BURLINGTON RES. OIL & GAS CO.
 LEASE EL PASO 23 FEDERAL #2

U.S.G.S. TOPOGRAPHIC MAP
PHANTOM BANKS, NEW MEXICO

SCALED LAT. N 32°01'55"
 LONG. W 103°51'06"



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 plat and notify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

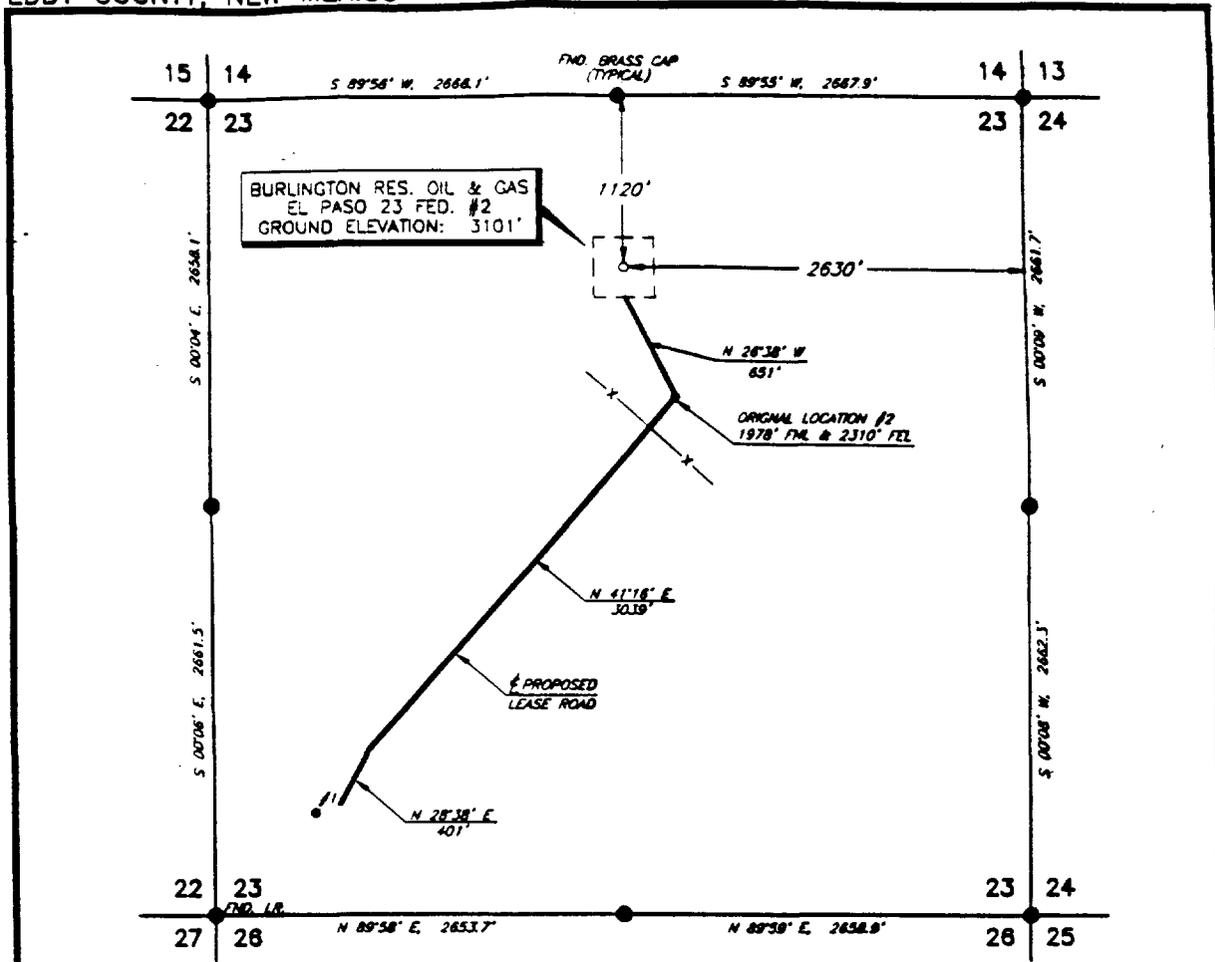
Surveying & Mapping for the Oil & Gas Industry

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

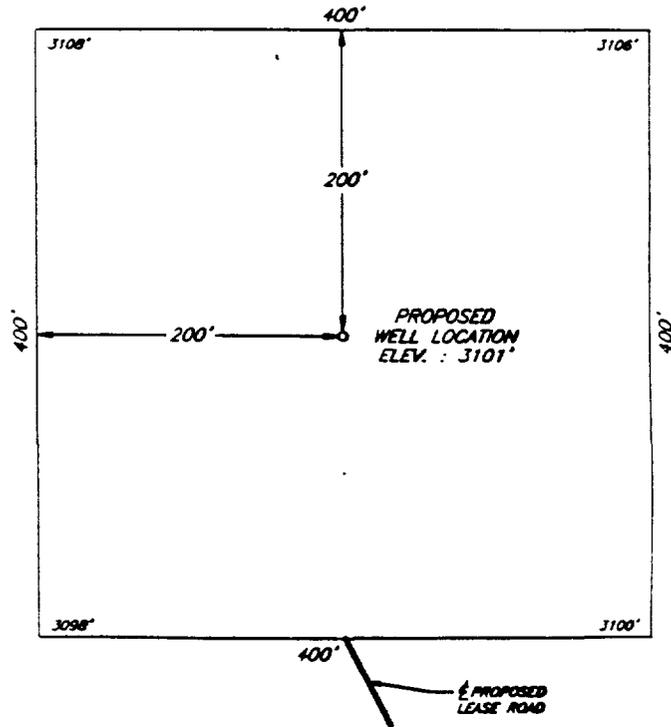
6709 N. CLASSEN BLVD.
 OKLAHOMA CITY, OK. 73116
 (800) 654-3219

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

PLAT SHOWING PROPOSED
WELL LOCATION AND LEASE ROAD IN
SECTION 23, T-26-S, R-30-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



PLAN VIEW
1" = 1000'



DETAIL VIEW
1" = 100'

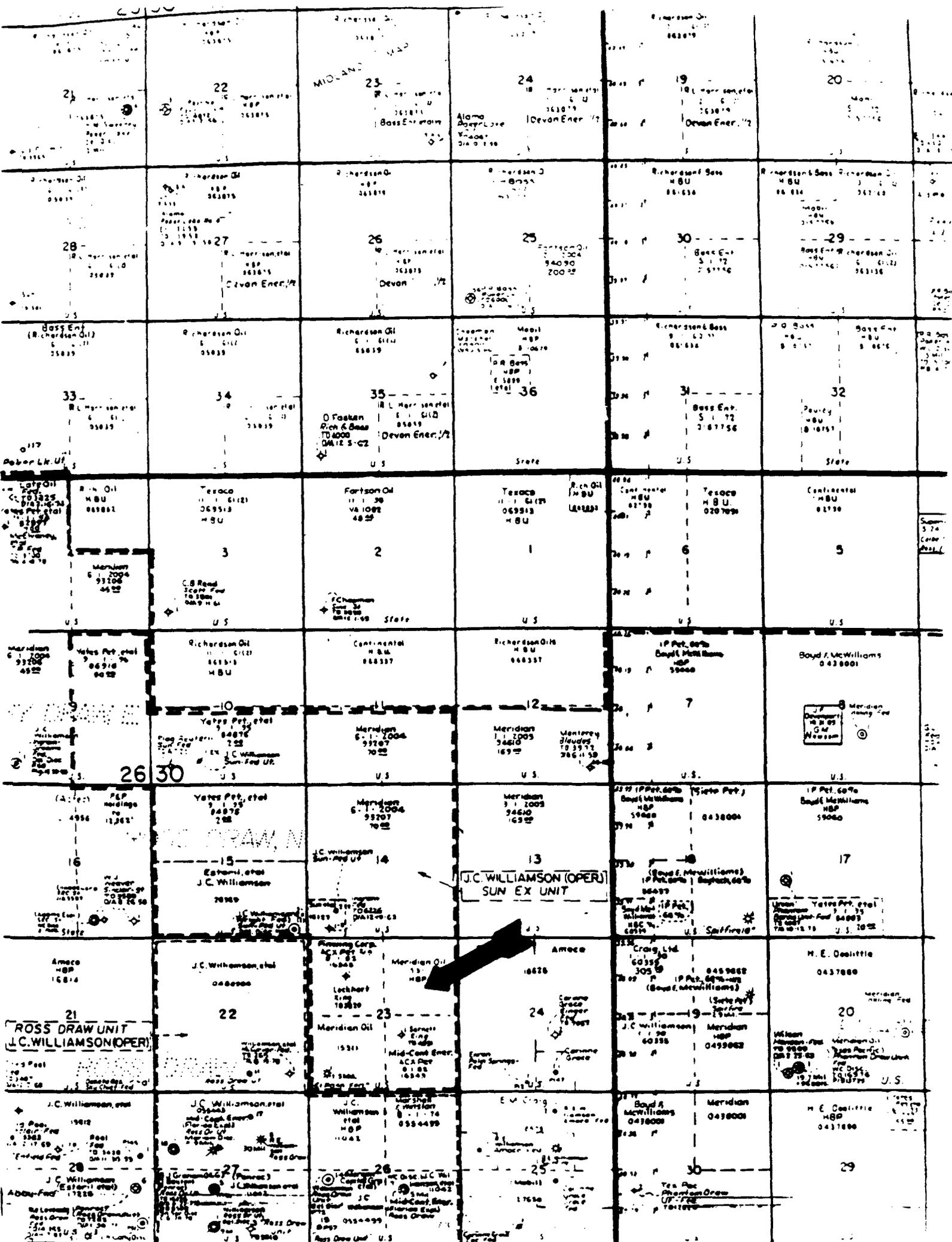
NO.	REVISION	DATE	BY

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

BURLINGTON RESOURCES OIL & GAS CO.

SURVEYING AND MAPPING BY
TOPOGRAPHIC LAND SURVEYORS
MIDLAND, TEXAS

SCALE:	AS SHOWN
DATE:	JULY 14, '997
JOB NO.:	52944-F
	23 SE
SHEET :	1 OF 1



MIDLAND

Richardson Oil

Alamo
Deer Creek
Yukon
D.A. 0-150

Richardson Oil

Devon Ener. '72

Richardson Oil

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Richardson Oil

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Boess Ent

Richardson Oil
H.B.U.
061861

Richardson Oil

ROSS DRAW UNIT
J.C. WILLIAMSON (OPER)

J.C. WILLIAMSON (OPER)
SUN EX UNIT



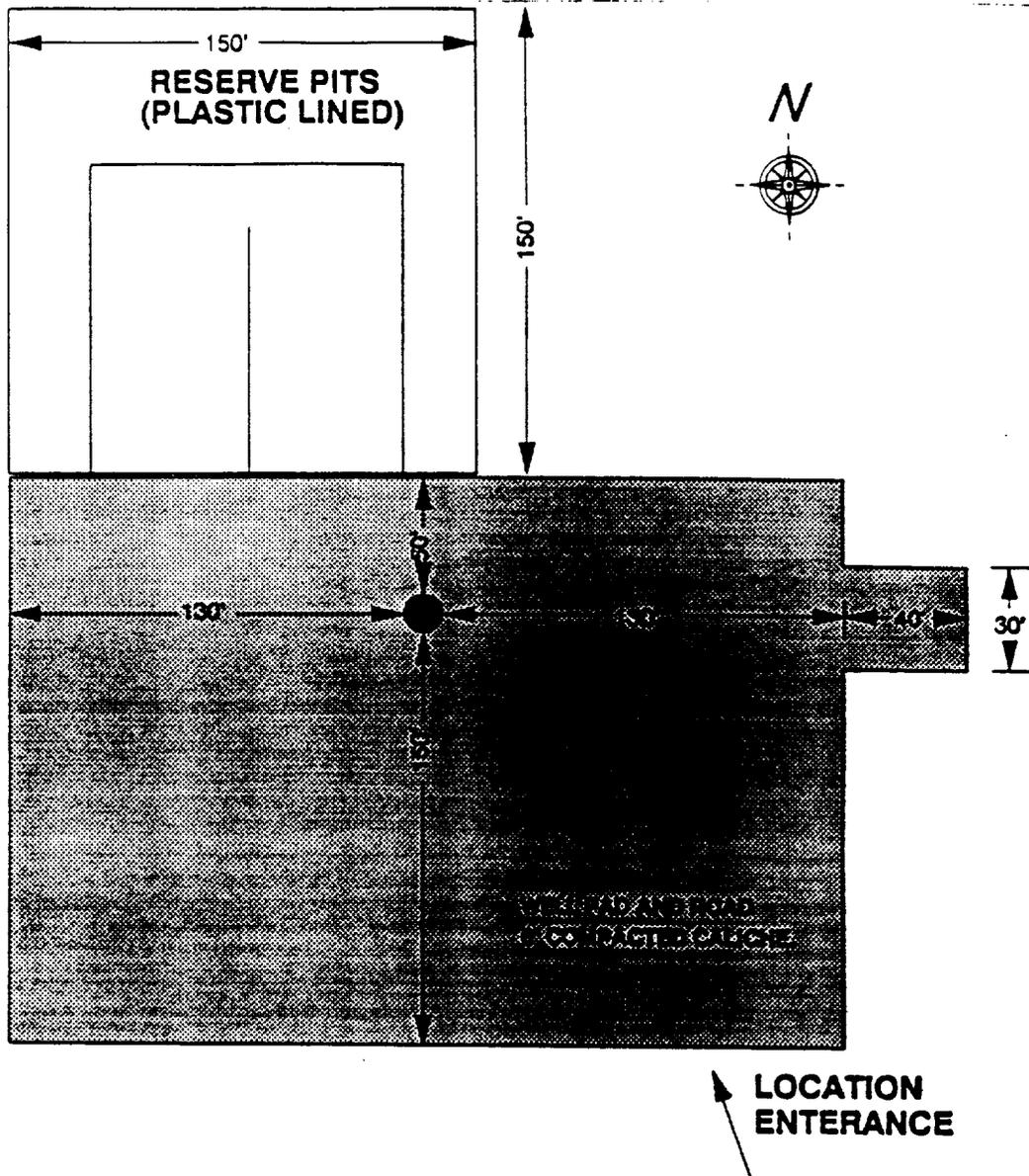
J.C. Williamson, et al
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J.C. Williamson, et al

MERIDIAN OIL

MIDLAND REGION

DRILL WELL LOCATION SPECIFICATIONS



400' x 400' WELL SITE