



**Vastar Resources, Inc.**

Joint Ventures and Land

15375 Memorial Drive  
Houston Texas 77079  
281 584-6000

June 19, 2000

Lori Wrontenberg, Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

Re: Application of Vastar Resources, Inc. for Administrative Approval of an Unorthodox Well Location for its Carracas 19 B Well No. 4, to be located 1,170 feet from the North line and 830 feet from the West line of Section 19, Township 32 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico

Dear Ms. Wrotenberg:

Vastar Resources, Inc. hereby seeks administrative approval pursuant to the provisions of Rule 8 of the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool adopted on October 17, 1988, of an unorthodox well location for its 19 B Well No. 4, to be drilled in the Fruitland Coal formation at an unorthodox well location 1,170 feet from the North line and 830 feet from the West line of Section 19, Township 32 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico. A standard 320-acre spacing and proration unit comprised of the W/2 of Section 19 will be dedicated to the well.

The well will be drilled to a depth of approximately 4,200 feet to test the Fruitland Coal formation, Basin-Fruitland Coal Gas Pool.

This location in the Fruitland Coal formation is unorthodox because Rule 7 of the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool (Order No. R8768, as amended) provides for wells to be located in the NE/4 or SW/4 of a single governmental section and located no closer than 660 feet to any outer boundary of the proration unit nor closer than 10 feet to any interior quarter-quarter section line or subdivision inner boundary.

This unorthodox location is required by topographic conditions and Carson National Forest requirements. Alamo Canyon occupies the majority of the SE of Section 19. The proposed well is located at the end of an existing road and would be drilled on an existing pad that was previously built, but not drilled upon. The Forest Service has requested that new wells be placed along existing roads so as not to further impact the environment with new access roads.

DATE 6/20/00	DATE 7/10/00	ENGINEER MS	LOGGED KV	TYPE NSL
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ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -

**ADMINISTRATIVE APPLICATION COVERSHEET**

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

**Application Acronyms:**

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]  
 [DD-Directional Drilling] [SD-Simultaneous Dedication]  
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

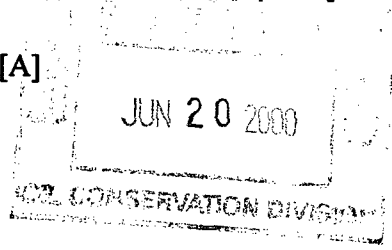
**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

- [A] Location - Spacing Unit - Directional Drilling  
 NSL     NSP     DD     SD

Check One Only for [B] and [C]

- [B] Commingling - Storage - Measurement  
 DHC     CTB     PLC     PC     OLS     OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX     PMX     SWD     IPI     EOR     PPR



**[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or  Does Not Apply**

- [A]  Working, Royalty or Overriding Royalty Interest Owners  
 [B]  Offset Operators, Leaseholders or Surface Owner  
 [C]  Application is One Which Requires Published Legal Notice  
 [D]  Notification and/or Concurrent Approval by BLM or SLO  
 [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,  
 [F]  Waivers are Attached

*6-23  
OK'd by  
Charlie  
MS*

**[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding**

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Thomas L. Fithian  
Print or Type Name

*Thomas L. Fithian*  
Signature

Rockies Engineering Manager  
Title

June 19, 2000  
Date

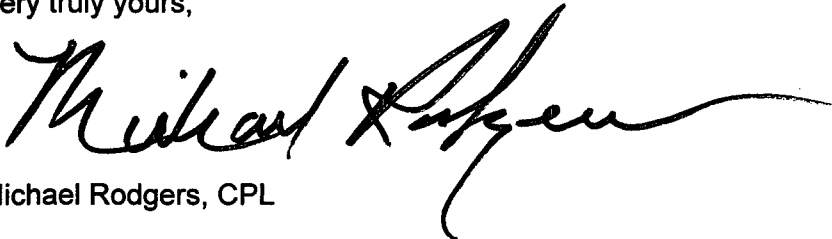
Lori Wrontenbery, Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
Carracas 19 B #4 Unorthodox Location  
June 19, 2000  
Page 2

Attached hereto as Exhibit A is a topographical map showing no standard location is available for the well on this spacing unit. Attached as Exhibit B and C are the C-102 Plat and the APD. These exhibits show that the unorthodox location is supported by the surface topography of the area.

Attached hereto as Exhibit D is a plat as required by Rule 104.F(3) showing the subject spacing unit, the proposed unorthodox well location, the offsetting wells and the diagonal and adjoining spacing units. Exhibit F lists parties affected by this application. A copy of this application, including a copy of the plat described above has been sent to these affected parties by certified mail-return receipt requested in accordance with Rule 1206(A)(5) advising them that if they have an objection to this application it must be filed in writing within twenty days from the date this notice was sent.

Copies of this request have also been provided to the Aztec Office and the Bureau of Land Management, Farmington District Office.

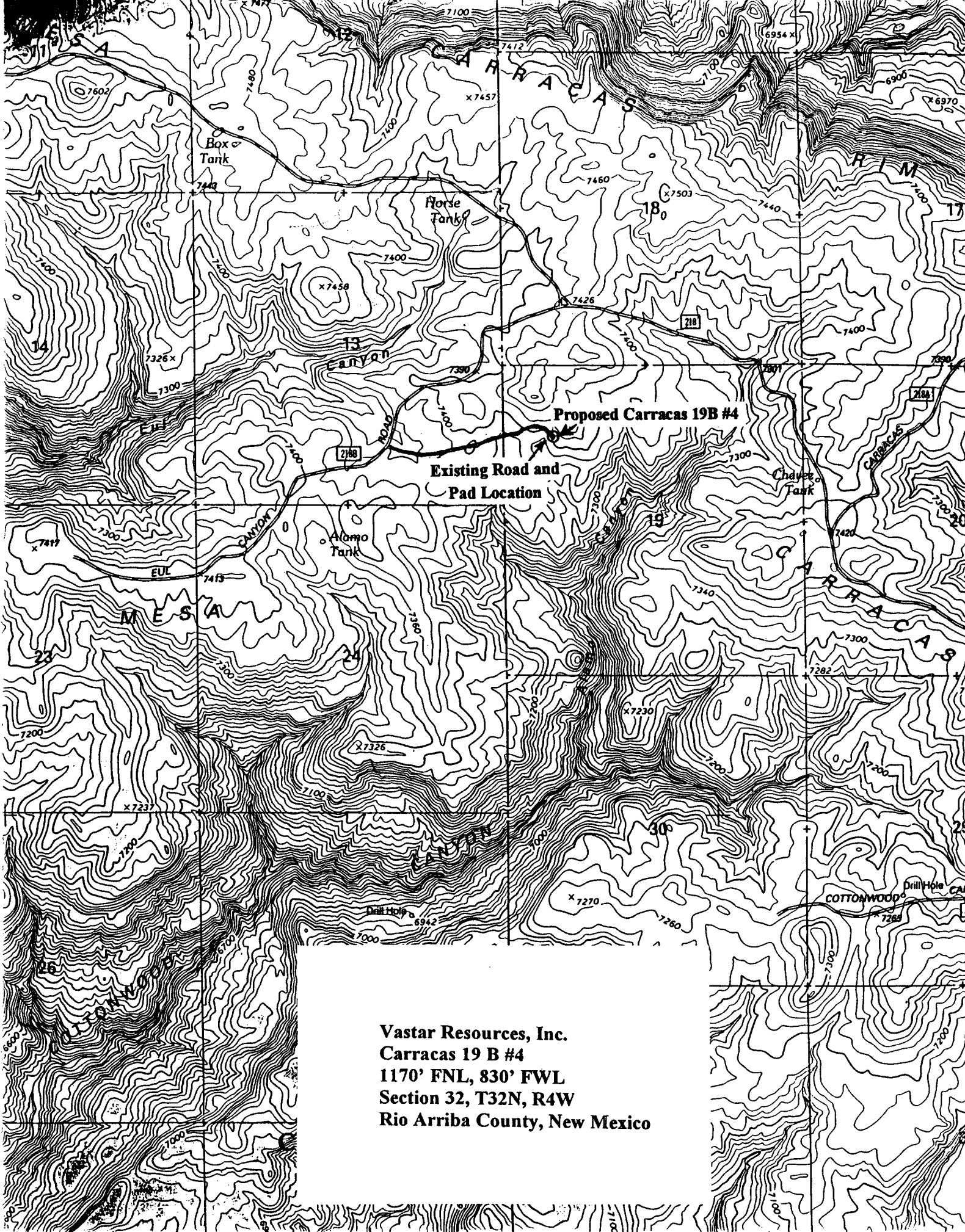
Very truly yours,

A handwritten signature in black ink, appearing to read "Michael Rodgers", with a long, sweeping underline that extends to the right.

Michael Rodgers, CPL

Direct Line: (281) 584-3230  
Fax: (281) 584-6370  
E-mail: mrodger@vastar.com

Enclosures



**Vastar Resources, Inc.**  
**Carracas 19 B #4**  
**1170' FNL, 830' FWL**  
**Section 32, T32N, R4W**  
**Rio Arriba County, New Mexico**

All distances must be from the outer boundaries of the Section.

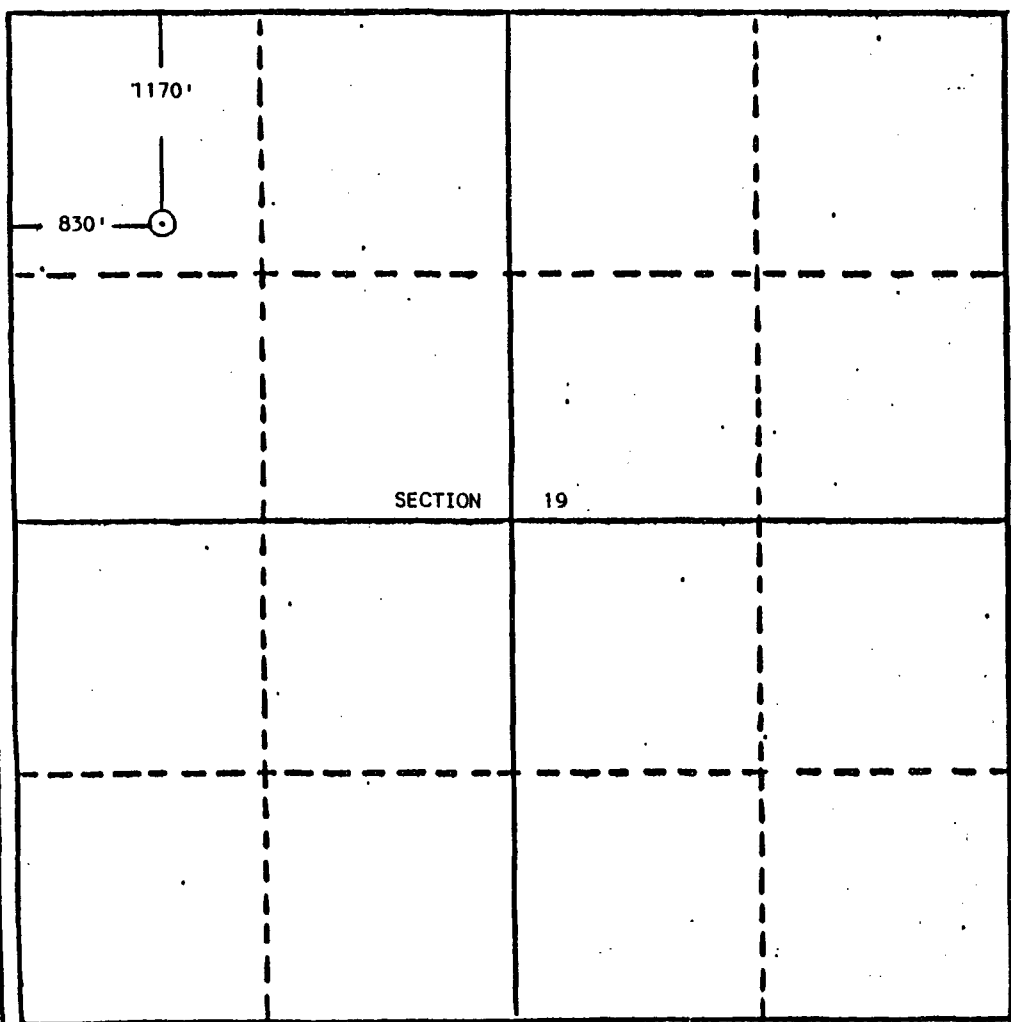
Operator <b>Vastar Resources, Inc.</b>		Lease <b>Carracas 19 B</b>			Well No. <b>4</b>
Well Letter <b>D</b>	Section <b>19</b>	Township <b>32 North</b>	Range <b>4 West</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well <b>1170</b> feet from the <b>North</b> line and <b>830</b> feet from the <b>West</b> line					
Ground Level Elev. <b>7401'</b>	Producing Formation <b>Fruitland Coal</b>		Pool <b>Basin Fruitland Coal</b>	Dedicated Acreage (W/2) <b>320</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plot below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



**CERTIFICATION**

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

*Charles W. Knight, Jr.*

Name  
**Charles W. Knight, Jr.**

Position  
**Engineer**

Company  
**Vastar Resources, Inc.**

Date  
**June 9, 2000**

**EDGAR L. RISENHOVER**  
REGISTERED LAND SURVEYOR  
No. 5979

Date Issued  
**August 31, 1988**

Registered Professional Engineer  
and/or Land Surveyor

*Edgar L. Risenhover*

Certificate No. **5979**  
**Edgar L. Risenhover, L.S.**





**Vastar Resources, Inc.**

1816 E. Mojave St.  
Farmington, New Mexico 87401  
505 599-4300  
505 599-4328 Fax

June 12, 2000

Bureau of Land Management  
Farmington District Office  
1235 La Plata Highway  
Farmington, New Mexico 87401

Re: APD – Carracas 19 B #4

Attached please find an APD package for the proposed Carracas 19 B #4 well located in the Carson National Forest in Rio Arriba County, New Mexico. Included are the following items:

- APD form 3160-3
- Surveyors plat with well location and elevation
- USGS Topographic Orientation Map
- Eight part Drilling Plan
- Thirteen part Surface Use Plan
- Drill site location/rig layout and site crosssection
- Offset well identifier map showing wells within a one mile radius
- BOP stack diagram
- Choke manifold diagram
- Surface production facilities diagram

A notice of staking was filed with your office on May 16, 2000 and an onsite review was performed with Cam Hooley of the Forest Service and Charlie Knight representing Vastar. The Forest Service had originally requested the existing reserve pit be set aside as a watering hole for area wildlife. At the onsite meeting the pit had dried up and the Forest Service decided to let Vastar use the pit for drilling operations provided an alternative wildlife pit is constructed. A wildlife pit location was selected then arch surveyed with no findings and an arch report will be available within the next few days. Please note the attached plat and support materials are for the original location as built and not for the site referenced with the NOS.

The proposed well site is unorthodox due to the location in the NW/4 of the section and an application for administrative approval for the well is in progress. Please contact Charlie Knight at Vastar in Farmington at (505) 599-4308 or Dave Reid at Vastar in Houston at (281) 584-3702 if further information is needed to process the attached application.

Charles W. Knight, Jr.  
Engineer

Form 3160-3  
(July 1992)

SUBMIT IN TRIPPLICATE\*  
(Other instructions on  
reverse side)

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.  
NM 30015

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.  
CARRACAS 19B #4

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT  
BASIN FRUITLAND COAL

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA  
SEC. 19, T-32N, R-4W

12. COUNTY OR PARISH  
RIO ARRIBA

13. STATE  
NM

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK  
DRILL  DEEPEN

b. TYPE OF WELL  
OIL WELL  GAS WELL  OTHER   
SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
VASTAR RESOURCES, INC.

3. ADDRESS AND TELEPHONE NO.  
1816 E. MOJAVE, FARMINGTON NM 87401 (505) 599-4300

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At SURFACE 1170' FNL & 830' FWL  
At proposed prod. zone SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
42 MILES EAST-NORTHEAST OF BLOOMFIELD, NM

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) 830'

16. NO. OF ACRES IN LEASE 2482.2

17. NO. OF ACRES ASSIGNED TO THIS WELL 300.52

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1961'

19. PROPOSED DEPTH 4200'

20. ROTARY OR CABLE TOOLS ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 7401' GL

22. APPROX. DATE WORK WILL START\* JULY, 2000

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	400'	300 sx (354 cf.) Circ. to Surf.
7-7/8"	5-1/2"	15.5#	4200'	900 sx (1730 cf.) Circ. to Surf.

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 Charles W. Knight, Jr. TITLE ENGINEER (505) 599-4308 DATE 6/12/00  
CHARLES W. KNIGHT, JR.  
 (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.

All distances must be from the outer boundaries of the Section.

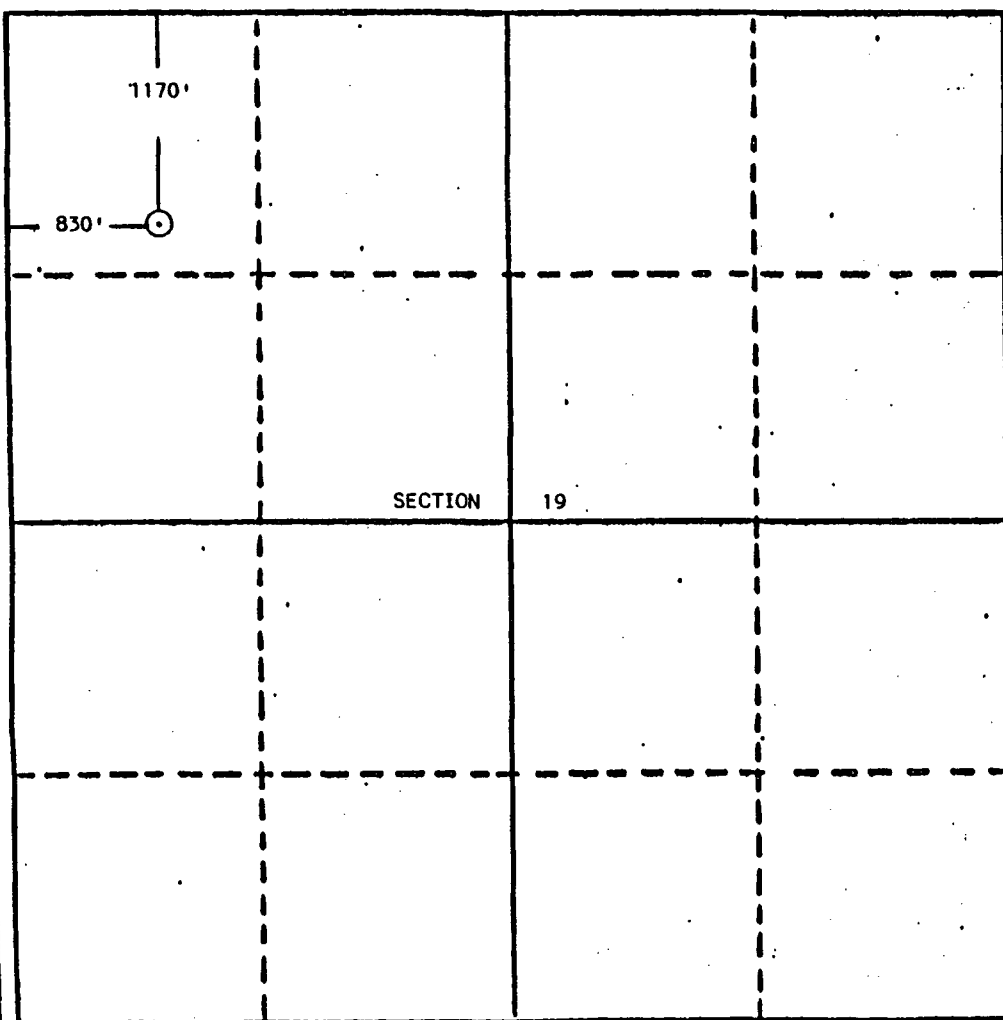
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Ground Level Elev. <b>7401'</b>	Producing Formation <b>Fruitland Coal</b>		Pool <b>Basin Fruitland Coal</b>	Deviated Section <b>(W/2) 320</b>	Acres

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Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

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No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



**CERTIFICATION**

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

*Charles W. Knight, Jr.*

Name  
**Charles W. Knight, Jr.**

Position  
**Engineer**

Company  
**Vastar Resources, Inc.**

Date  
**June 9, 2000**

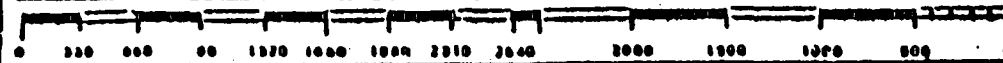
EDGAR L. RISENHOVER  
NEW MEXICO  
5979  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Date Expired  
**August 31, 1988**

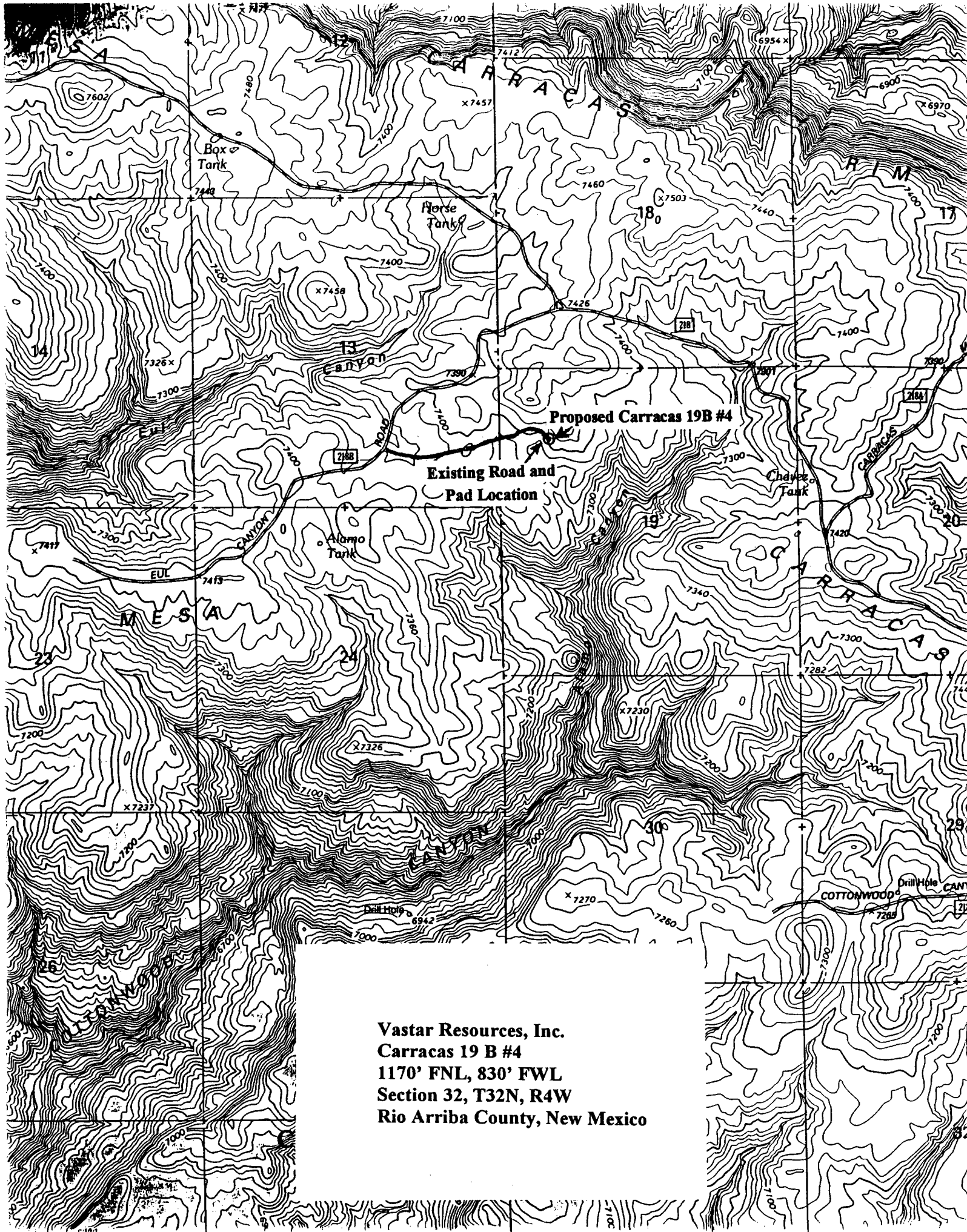
Registered Professional Engineer  
and/or Land Surveyor

*Edgar L. Risenhoover*

Certificate No. **5979**  
**Edgar L. Risenhoover, L.S.**







Vastar Resources, Inc.  
Carracas 19 B #4  
1170' FNL, 830' FWL  
Section 32, T32N, R4W  
Rio Arriba County, New Mexico

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Carracas 19 B #4

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**DRILLING PLAN**

1. **FORMATION TOPS: The estimated tops of geologic markers as follows:**

Ojo Alamo	3268'
Kirkland	3523'
Fruitland	3965'

2. **ANTICIPATED DEPTHS OF OIL, GAS, AND WATER:**

Ojo Alamo	3268' - Water
Fruitland	3965' - Gas

All zones capable of oil, gas, or water production will be protected with 8 5/8" or 5 1/2" casing and cemented to surface.

3. **BLOWOUT PREVENTOR REQUIREMENTS:**

<u>Interval</u>	<u>Pressure Control Equipment</u>
Surface - 400'	No equipment necessary
400' - TD	10" 2000 psi Double Ram preventor, rotating head and choke manifold.

All BOPE will be hydraulically pressure tested when nipped up, after well control use and every thirty days. Pressure tests will be to the lesser of 2000 psi or to 70% of the minimum internal yield pressure of the casing.

Blind rams will be functioned on each trip out of the hole. All BOPE checks will be noted on the daily drilling reports.

Additional BOPE equipment includes a kelly cock, FO safety valve and an inside BOP.

SEE ATTACHED BOP DIAGRAM

4. **CASING AND CEMENTING PROGRAM:**

The proposed casing program will be as follows:

<u>Hole Section</u>	<u>Hole Size</u>	<u>Interval</u>	<u>Casing Size</u>	<u>Casing Specs</u>
Surface	12-1/4"	Surface to 400'	8-5/8"	24# J-55 STC
Production	7-7/8"	400' to 4200'	5-1/2"	17# J-55 LTC

<u>Hole Section</u>	<u>Slurries</u>
Surface	300 sx Class B with 3% CaCl <sub>2</sub> & 1/4 lb/sk CF (354 cu. ft., 1.18 yield)
Production	Lead 800 sx 35:65 Class B:poz + 5#/sx Gilsonite + 1/4 lb/sk CF (1592 cu. ft., 1.99 yield) Tail 100 sx 50:50 Class B:poz + 5#/sx Gilsonite + 0.4% FLA + 1/4 lb/sk CF (138 cu. ft., 1.38 yield)

5. **MUD PROGRAM:** The proposed circulating mediums to be employed in drilling are as follows:

<u>Depth</u>	<u>Mud Type</u>	<u>Density</u>	<u>Funnel Vis</u>	<u>Fluid Loss</u>
Surface to 400'	Spud Mud	8.3 to 9.5 ppg	30 to 60	No Control
400' to 3500'	Water	8.3 to 8.7 ppg	28 to 35	No Control
3500' to TD	LSND	8.7 to 9.2 ppg	35 to 45	≤ 20 cc

Vastar Resources, Inc.  
Carracas 19 B #4  
1170' FNL, 830' FWL  
Sec 19, T32N, R4W  
Rio Arriba County, New Mexico

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6. **TESTING, LOGGING, AND CORING:** The anticipated type and amount of testing, logging, and coring are as follows:

- a. Drill stem tests are not anticipated.
- b. The electric wireline logging program will be as follows:

Temperature survey if cement does not circulate.  
Cased hole GR/CCL/CNL

- c. Mud logging: 3500' to TD.
- d. Coring program: No cores are anticipated.

7. **ABNORMAL PRESSURES AND H<sub>2</sub>S GAS:**

No abnormal conditions are anticipated during the drilling and completion of this well. Standard well control practices and equipment will be used for the duration of this well.

8. **OTHER INFORMATION & NOTIFICATION:**

- a. Vastar Resources, Inc. is operating under our United Pacific national bond on file with the BLM. That BLM bond number is ES 0309.
- b. Construction operations are planned to start pending approval of the APD. Location preparation is estimated to take 2 to 3 days. The drilling activity should take 6 days. The drilling rig may be used for the completion portion of the well. The completion activities are anticipated to take 9 days. Total duration of activities preparing this well to produce should take an estimated 23 days.
- c. In the event of an emergency, contact the following:

Charlie Knight  
Project Engineer  
(505) 599-4308 (office)  
(281) 599-4338 (fax)

Dave Reid  
Project Engineer  
(281) 584-3702 (office)  
(281) 584-6810 (fax)

Vastar Resources, Inc.  
Carracas 19 B #4  
1170' FNL, 830' FWL  
Sec 19, T32N, R4W  
Rio Arriba County, New Mexico

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## **SURFACE USE PLAN**

### **1. EXISTING ROADS:**

- a. The proposed well site is located about 42 miles east-northeast of Bloomfield, New Mexico (this distance is direct and not by road). See attached USGS Topographic orientation map and offset well map for reference.
- b. Road Directions to the location are as follows:  
From Bloomfield, NM: Go east on Hwy 64 about 48 miles to the 114-1/2 mile marker and turn left on Forest Road 310. Go north on FR 310 for 18.7 miles at which point the road becomes FR 218. Continue northward for another 7.6 miles to a Y in the road at Carracas 18 B #13. Take the left fork which will be FR 2188 and go southwest about 3/4 mile and turn left onto Carracas 19 B #4 access road and pass through gate and on to Carracas 19 B #4 well site.
- c. For location of existing access roads within a 2 mile radius, see attached maps.
- d. Improvement to the existing access will not be necessary.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. Existing roads and newly constructed roads on surface under the jurisdiction of any Surface Managing Agency shall be maintained in accordance with the standards of the SMA.

### **2. ACCESS ROADS TO BE CONSTRUCTED OR RECONSTRUCTED:**

A new lease road will not be required since well location is located at the end of an existing road.

Vastar Resources, Inc.  
Carracas 19 B #4  
1170' FNL, 830' FWL  
Sec 19, T32N, R4W  
Rio Arriba County, New Mexico

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3. **LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS OF THE PROPOSED LOCATION :**

Reference attached maps for the location of offsetting wells below:

a. Producing wells -

<u>T31N, R5W</u>	<u>Well #</u>	<u>Producing Formation</u>
Section 18	18 B #13	Fruitland Coal
18 B #15	Fruitland Coal	
Section 19	19 B #1	Fruitland Coal
<u>T31N, R5W</u>		
Section 13	13 A #15	Fruitland Coal
Section 24	24 A #7	Fruitland Coal

b. Drilling Wells - none

c. Plugged Wells - none

d. Dry Holes - none

4. **LOCATION OF TANK BATTERIES AND PRODUCTION FACILITIES:**

Production facilities will be installed as per the attached facilities diagram. The production equipment to be utilized will be a separator, water tank, and a gas meter run.

5. **LOCATION AND TYPE OF WATER SUPPLY:**

- a. All water needed for drilling purposes will be fresh water purchased from commercial sources and treated with Biocide as needed.
- b. No water well is to be drilled on this lease.

6. **SOURCE OF CONSTRUCTION MATERIAL:**

- a. Surface and subsoil materials will be hauled in from the immediate area.
- b. Any gravel used will be obtained from a commercial source and transported in on the designated access route.

7. **METHODS OF HANDLING WASTE DISPOSAL:**

- a. Drill Cuttings will be handled in the reserve pit and buried during reclamation operations. The pit will be fenced on three sides during drilling and the fourth side fenced upon removal of the drilling rig.
- b. Garbage and nonflammable waste produced during the drilling or testing will be handled in a trash bin.
- c. Toilet facilities will be provided for human waste.
- d. Drilling fluids will be handled in the reserve pit.



Vastar Resources, Inc.  
Carracas 19 B #4  
1170' FNL, 830' FWL  
Sec 19, T32N, R4W  
Rio Arriba County, New Mexico

Page 7

- e. Any fluids produced during drilling or production tests will be collected in a test tank. If a test tank is not available during drilling, fluids will be handled in the reserve pit. Any spills of oil, gas, salt water, or other noxious fluids will be cleaned-up and removed. If the well is productive, produced water will be disposed of on site for 90 days. After that time, application will be made for approval of permanent disposal methods.

**8. ANCILLARY FACILITIES:**

There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

**9. WELL SITE LAYOUT:**

- a. The reserve pit will be located on the southwest side of the location.
- b. Access to the wellpad will be along an existing lease road.
- c. The location of mud tanks, reserve pit, flare pit, and pipe racks will be as shown on the wellpad layout plat.
- d. See pad cross-section plat for cut and fill of the drill pad.

**10. PLANS FOR RESTORATION OF SURFACE:**

Producing Location

- a. Immediately upon completion of drilling operations, the location and surrounding area will be cleared of all unused tubulars, equipment, debris, materials, trash and junk not required for production and "back dragged" in readiness for completion operations.

Vastar Resources, Inc.  
Carracas 19 B #4  
1170' FNL, 830' FWL  
Sec 19, T32N, R4W  
Rio Arriba County, New Mexico

Page 8

- b. Immediately upon well completion, any stimulation fluids collected in the test tank will be disposed of. As this is a dry gas well, no production of liquid hydrocarbons is expected.
- c. Cuttings will be buried in the reserve pit. The pits and any portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours, fertilized, and seeded.

Plugged and Abandoned Well

- a. Dry hole reclamation will be coordinated with the BLM at the time of abandonment as to the physical requirements and timing & weather issues.

**11. SURFACE & MINERAL OWNERSHIP:**

Access roads            All existing roads to the lease are maintained and owned by the County, State Highway Department, U.S. Forest Service, and/or the area operator road committee.

Wellsite & Road        The lease road and the wellpad are located on surface owned by:

U.S. Forest Service  
Jicarilla Ranger District  
664 E. Broadway  
Bloomfield, NM 87413

**LEASE INFORMATION:**

BLM Lease Number: NM 30015

**12. OTHER INFORMATION:**

- a. All vehicle traffic will be restricted to the access road, lease road, and well pad. Vastar will prohibit firearms & alcoholic beverages from the location and lease.

Vastar Resources, Inc.  
Carracas 19 B #4  
1170' FNL, 830' FWL  
Sec 19, T32N, R4W  
Rio Arriba County, New Mexico

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13. **LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:**

Questions about this permit application or emergency notifications should be directed to:

Permit, Drilling, & Completion Matters

Vastar Resources, Inc.  
1816 E. Mojave  
Farmington, NM 87401  
(505) 599-4300


Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; and that the work associated with operations proposed herein will be performed by Vastar Resources, 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 filing of a false statement.

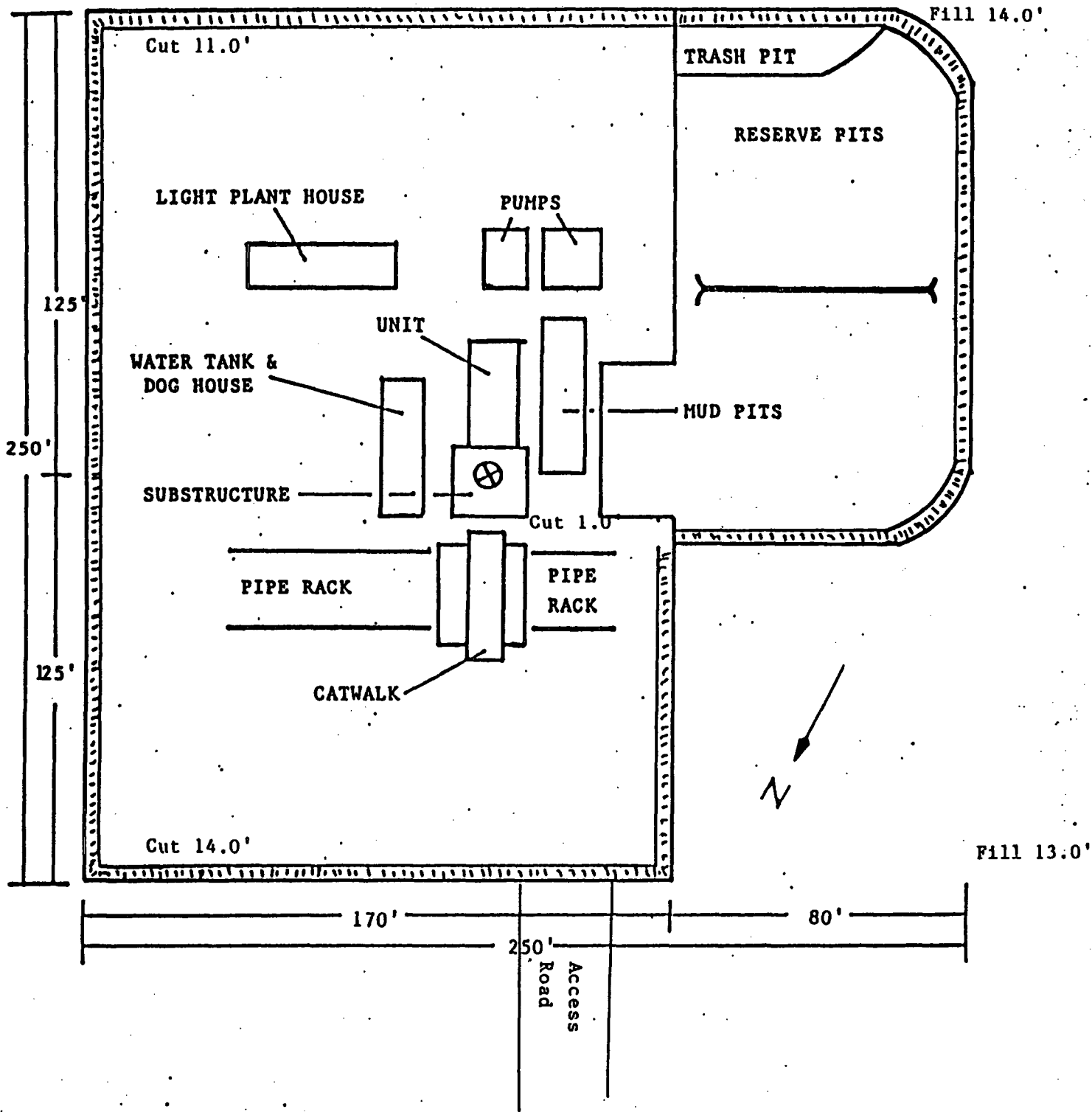
6-12-00

Date

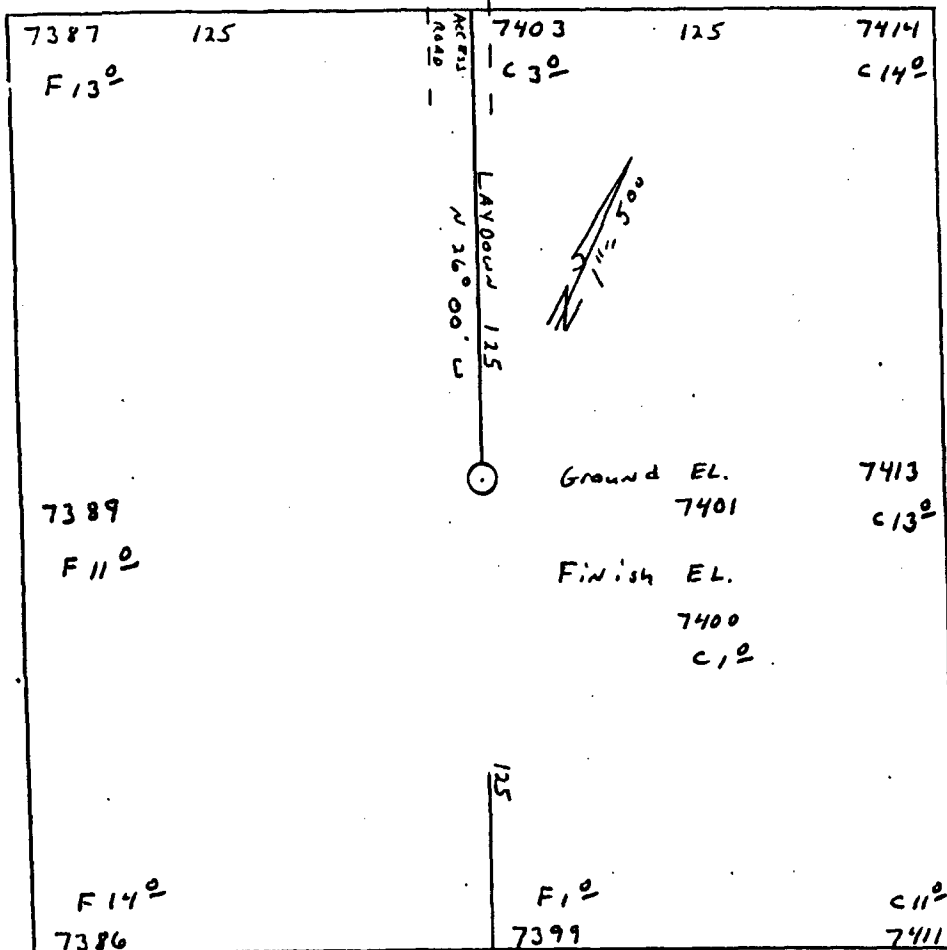
  
\_\_\_\_\_  
Charles W. Knight, Jr.

For: Joe Garcia  
Vastar Resources, Inc.

TYPICAL LOCATION LAYOUT FOR FRUITLAND WELL



Vastar Resources, Inc.  
Carracas 19 B #4  
1170' FNL, 830' FWL  
Section 32, T32N, R4W  
Rio Arriba County, New Mexico



**Vastar Resources, Inc.**  
**OPERATOR**

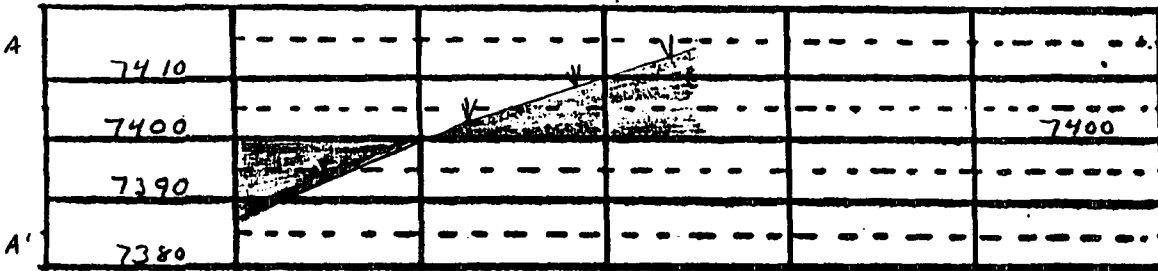
Carracas Unit 19 B #4  
**WELL NAME & NO.**

1170' F/NL 830' F/NL  
**FOOTAGES**

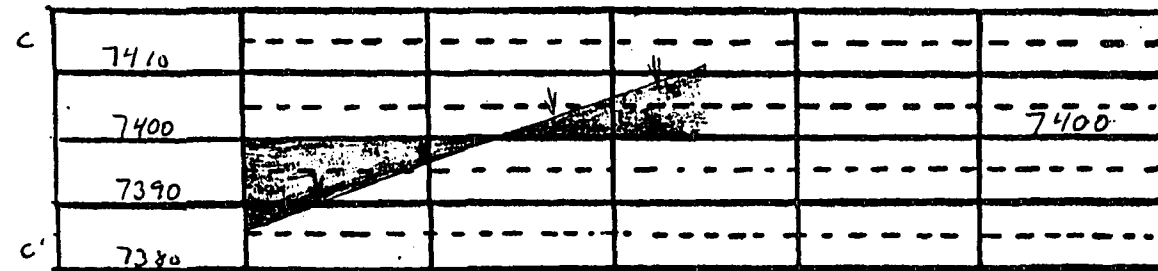
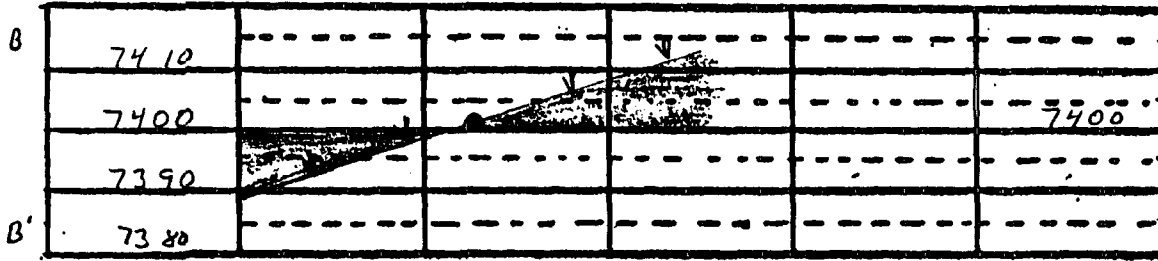
19 32N 4W  
**SEC. TWP. RGE.**

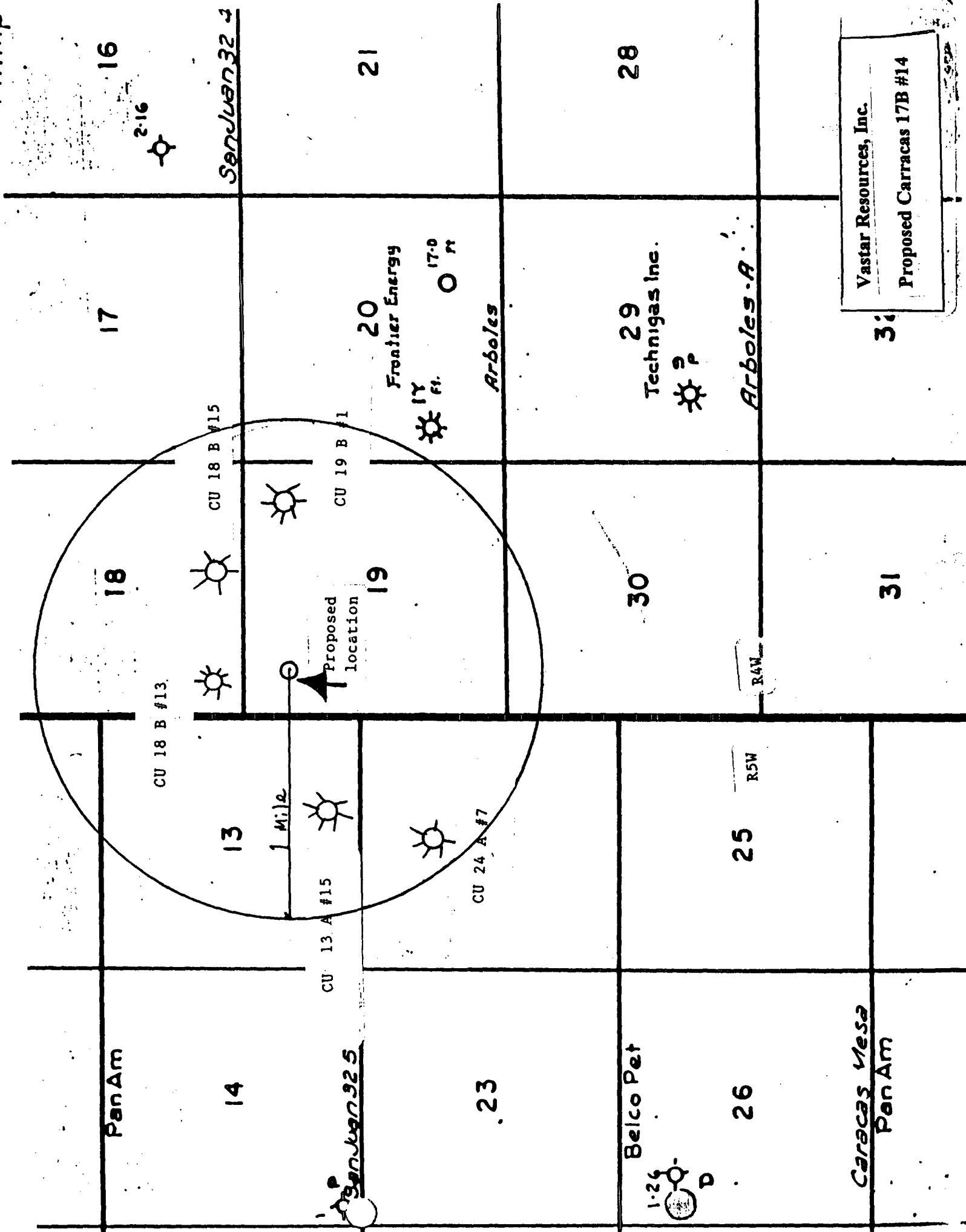
Rio Arriba, NM  
**COUNTY**

June 9, 2000  
**DATE**



Horz 1" = 100  
 Vert 1" = 30





16

17

18

14

13

21

20

19

23

28

29

30

25

26

31

31

2-16



San Juan 32 4

CU 18 B #15

CU 19 B #1

CU 18 B #13

1 Mile

CU 13 A #15

CU 24 A #7

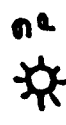
Frontier Energy



17.0 ft

Arboles

Technigas Inc.



Arboles A

Caracas Mesa  
PanAm

Belco Pet



R4W

R5W

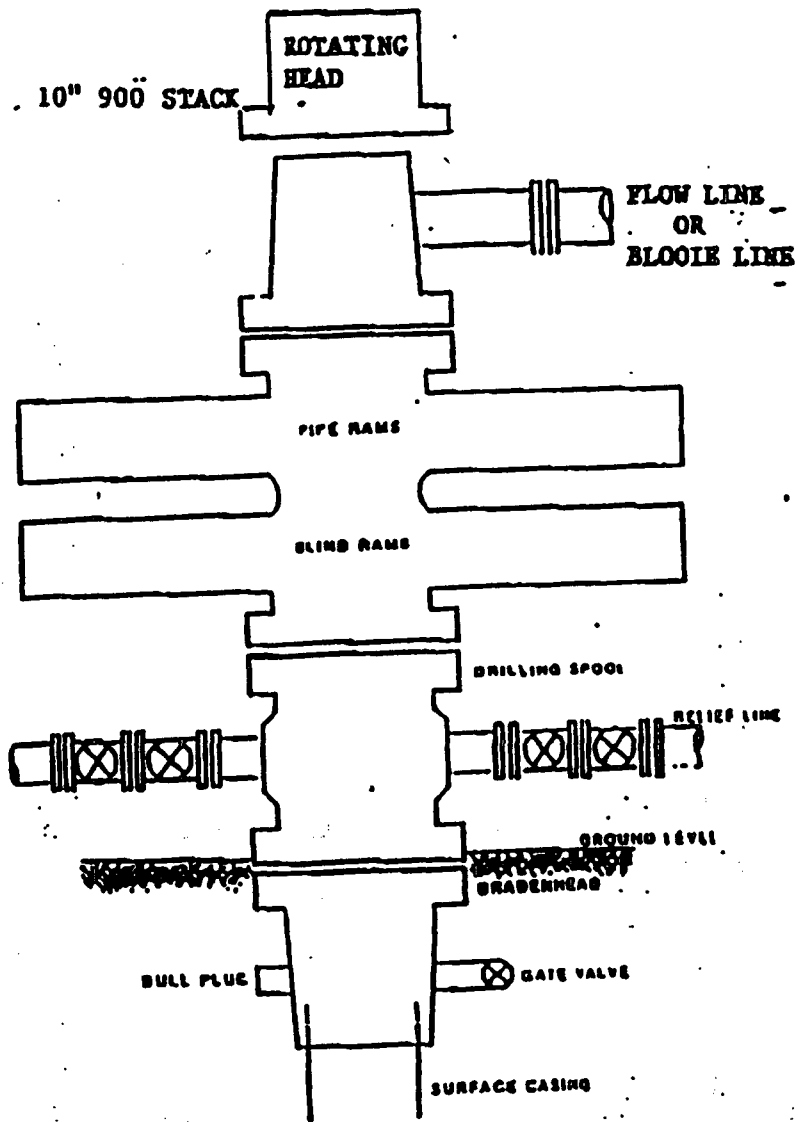
Vastar Resources, Inc.  
Proposed Carracas 17B #14

San Juan 32 5

Proposed location

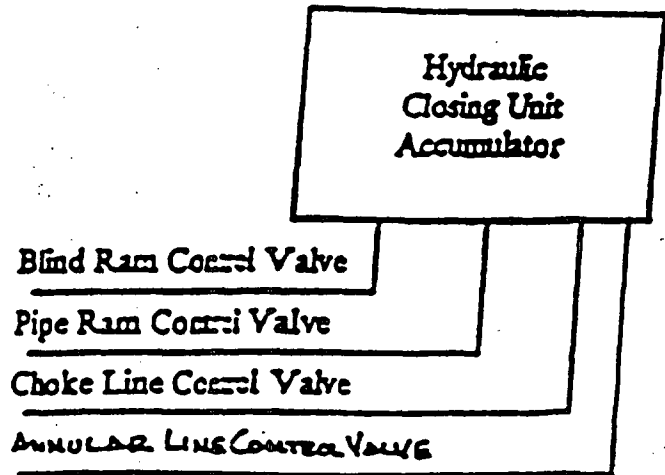
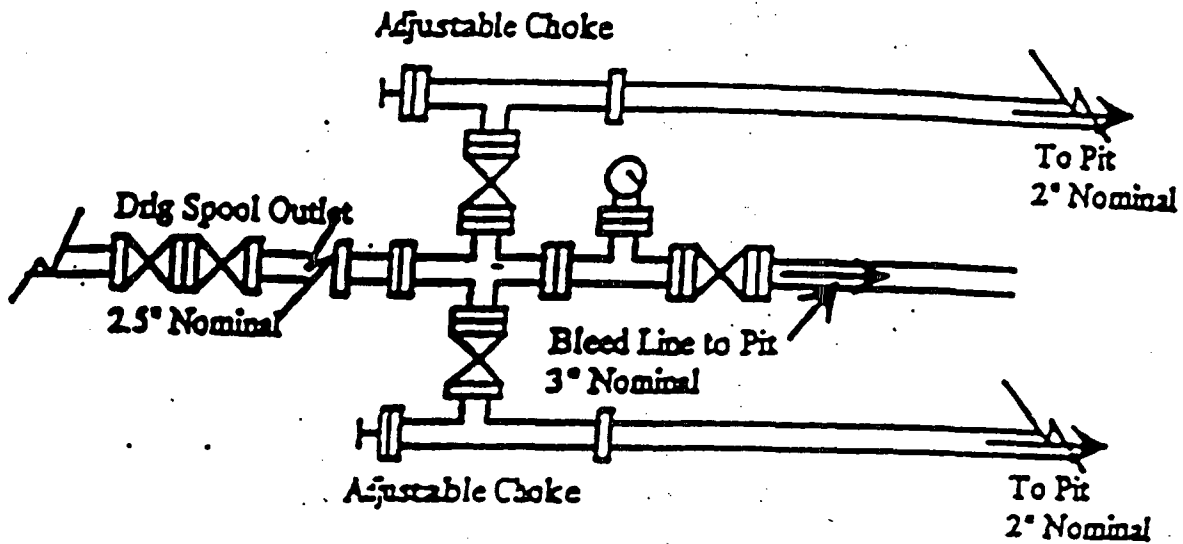


# Figure #1 (BOP)



Series 800 double gate BOP  
Used at 3000 psi working pressure

# Choke Manifold and Accumulator Schematic





# Facilities Layout Diagram

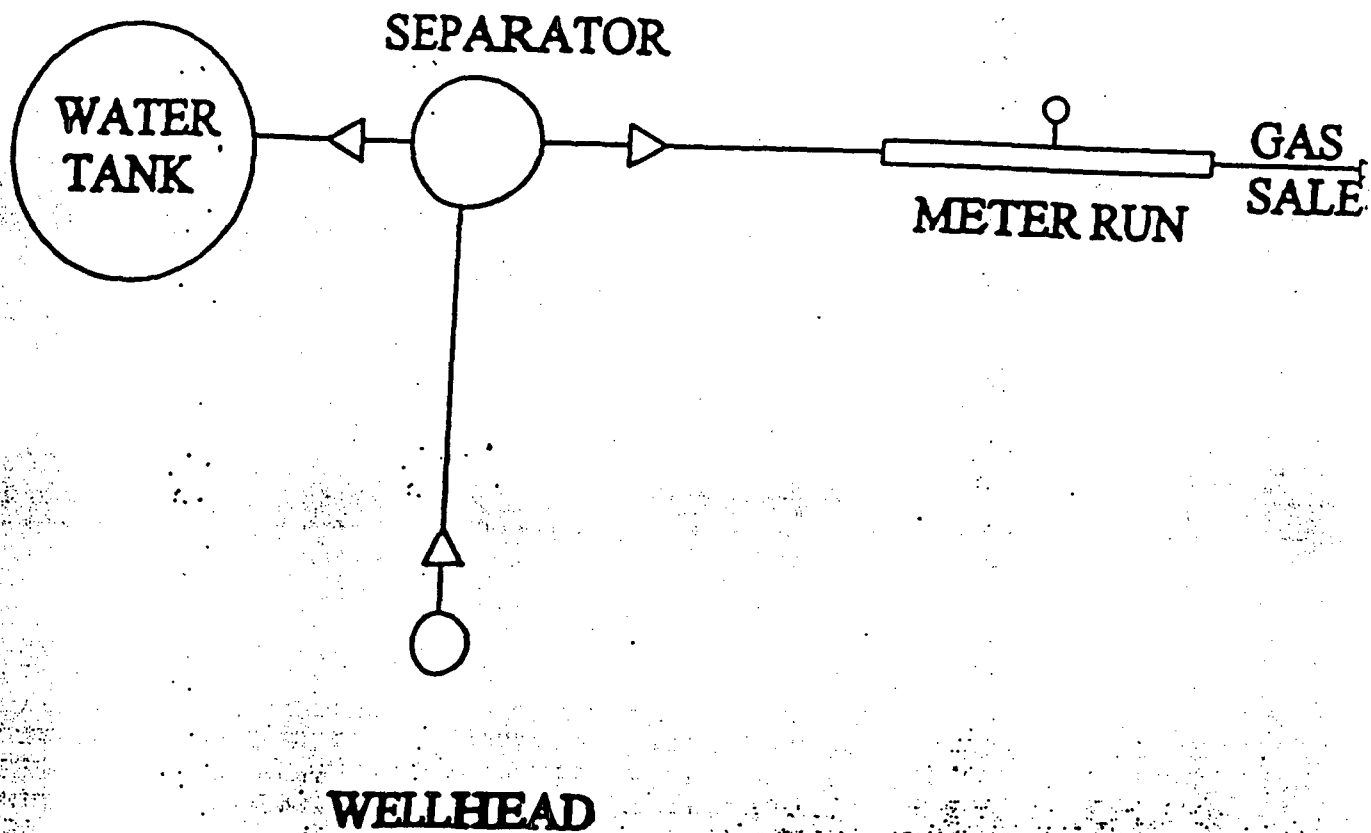


Exhibit D

Attached to Request for Administrative Approval of an Unorthodox Location for Vastar's Carracas 19 B #4 Well in W2 Section 19, T32N-R4W, NMPM, Rio Arriba County, New Mexico

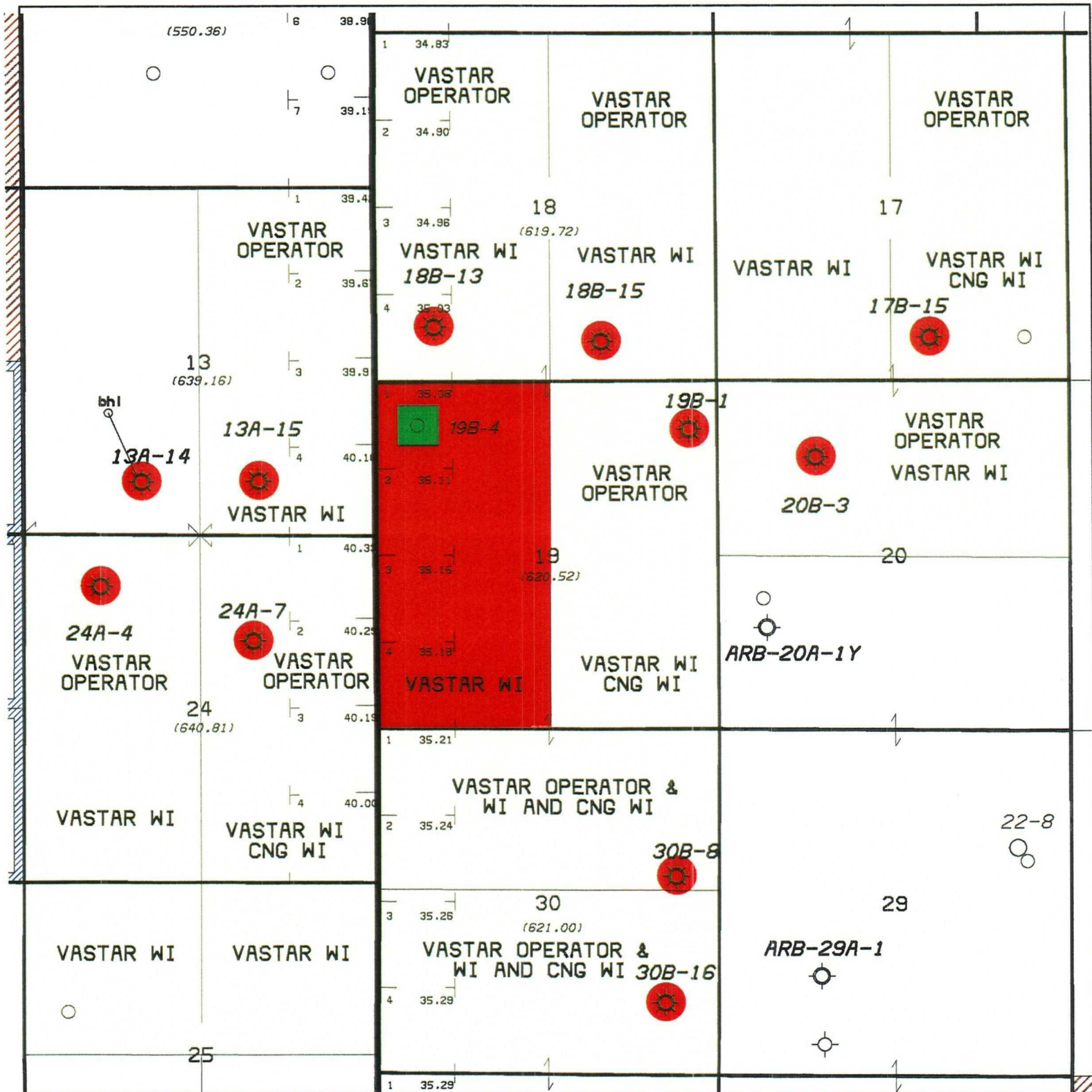


Exhibit E

Attached to Request for Administrative Approval of an  
Unorthodox Location for Vastar's Carracas 19 B #4 Well in W2  
Section 19, T32N-R4W, NMPM, Rio Arriba County, New Mexico

**List of Affected Parties**

CNG Resources, Inc.  
Stephen Case, Landman  
16945 Northchase Drive – Suite 1750  
Houston, Texas 77060  
(281) 873-1574

Bureau of Land Management  
Farmington Resource Area  
Authorized Officer  
1235 La Plata Highway – Suite A  
Farmington, New Mexico 87401

NMOCD – Aztec District Office  
1000 Rio Brazos Road  
Aztec, New Mexico 87410

P 066 862 333

US Postal Service  
**Receipt for Certified Mail**

No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

JUN 19 2000

Sent to CNG Resources -Stephen Case	
Street & Number 16945 Northchase Dr - Suite 1750	
Post Office, State, & ZIP Code Houston TX 77060	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Michael Rodgers, Room 1400

Fold at line over top of envelope to the right of the return address

**CERTIFIED**

P 066 862 333

**MAIL**

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

**3. Article Addressed to:**

CNG RESOURCES INC  
STEPHEN CASE, LANDMAN  
16945 NORTHCHASE DR - SUITE 1750  
HOUSTON TX 77060

**4a. Article Number**

P 066 862 333

**4b. Service Type**

- |  |   |
|--|---|
| <input type="checkbox"/> Registered                                | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail                              | <input type="checkbox"/> Insured              |
| <input checked="" type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD                  |

**7. Date of Delivery**

**5. Received By: (Print Name)**

**6. Signature: (Addressee or Agent)**

X

**8. Addressee's Address (Only if requested and fee is paid)**

Thank you for using Return Receipt Service.



**Vastar Resources, Inc.**

Joint Ventures and Land

15375 Memorial Drive  
Houston Texas 77079  
281 584-6000

June 19, 2000

**By USPS Certified Mail  
With Return Receipt  
P 066 862 333**

CNG Resources, Inc.  
Stephen Case, Landman  
16945 Northchase Drive – Suite 1750  
Houston, Texas 77060

Re: Application of Vastar Resources, Inc. for Administrative Approval of an Unorthodox Well Location for its Carracas 19 B Well No. 4, to be located 1,170 feet from the North line and 830 feet from the West line of Section 19, Township 32 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico

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Gentlemen:

Notice is hereby given of Vastar Resources, Inc.'s application to the NMOCD for an Unorthodox Fruitland Coal Well Location for the captioned well. A copy of Vastar's application is enclosed. In accordance with NMOCD Rule 1206(A)(5) an objection to this application must be filed in writing within twenty days from the date this notice was sent.

By the enclosed Waiver, Vastar requests your company's waiver of its right to protest the application and the twenty-day period during which it might file a written protest.

Very truly yours,

Michael Rodgers, CPL

Direct Line: (281) 584-3230  
Fax: (281) 584-6370  
E-mail: mrodger@vastar.com

Enclosure



**Vastar Resources, Inc.**

Joint Ventures and Land

15375 Memorial Drive  
Houston Texas 77079  
281 584-6000

June 19, 2000

CNG Resources, Inc.  
Stephen Case, Landman  
16945 Northchase Drive – Suite 1750  
Houston, Texas 77060

Re: Application of Vastar Resources, Inc. for Administrative Approval of an Unorthodox Well Location for its Carracas 19 B Well No. 4, to be located 1,170 feet from the North line and 830 feet from the West line of Section 19, Township 32 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico

Gentlemen:

Notice has been given of Vastar Resources, Inc.'s application to the NMOCD for an Unorthodox Fruitland Coal Well Location for the captioned well. In order to facilitate the application and drilling of this well, Vastar requests your company's waiver of its right to protest the application and the twenty-day period during which it might file a written protest.

If CNG Resources, Inc. is willing to waive its right to protest the application, please so indicate by completing the waiver below and forwarding the signed original of this request to the Oil Conservation, Division of the New Mexico Department of Energy, Attention: Mr. Michael Stogner, 2040 South Pacheco Street, Santa Fe, New Mexico 87505. Please forward a copy of this signed waiver to the undersigned at the letterhead address.

Very truly yours,

Michael Rodgers, CPL

Direct Line: (281) 584-3230  
Fax: (281) 584-6370

This \_\_\_\_\_ day of June, 2000, CNG Resources, Inc. hereby waives its right to protest Vastar's application for an unorthodox location for the above referenced Fruitland Coal well.

\_\_\_\_\_  
Title: \_\_\_\_\_



**Vastar Resources, Inc.**

Joint Ventures and Land

15375 Memorial Drive  
Houston Texas 77079  
281 584-6000

June 19, 2000

Bureau of Land Management  
Farmington Resource Area  
Authorized Officer  
1235 La Plata Highway – Suite A  
Farmington, New Mexico 87401

NMOCD – Aztec District Office  
1000 Rio Brazos Road  
Aztec, New Mexico 87410

Re: Applications of Vastar Resources, Inc. for Administrative Approval of Unorthodox  
Fruitland Coal Well Locations in Carracas Canyon Area, Rio Arriba County, New  
Mexico

Gentlemen:

Enclosed for your records are copies of Vastar Resources, Inc.'s applications to the NMOCD in Santa Fe for Unorthodox Fruitland Coal Well Locations for the following wells.

Carracas 19 B Well No. 4  
Carracas 25 A Well No. 16  
Carracas 2 A Well No. 11 in a non-standard 368.6-acre spacing unit  
Carracas 36 A Well No. 5

Very truly yours,

Michael Rodgers, CPL

Direct Line: (281) 584-3230  
Fax: (281) 584-6370  
E-mail: mrodger@vastar.com

Enclosures