

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

SINGLE ZONE ☐

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

JACK GRYNBERG AND ASSOCIATES

3. ADDRESS OF OPERATOR

1050 17th Street, Suite 1950, Denver, Colorado 80265

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

At surface

62.29' FSL and 1983.97' FEL

At proposed prod. zone of Sec. 29, T 5 S - R 24 E

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

27 Miles NNe of Roswell, New Mexico

15. DISTANCE FROM PROPOSED*

62.29'

16. NO. OF ACRES IN LEASE

160.00

17. NO. OF ACRES ASSIGNED TO THIS WELL

160

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. N/A

19. PROPOSED DEPTH

4152'

20. ROTARY OR CABLE TOOLS

Rotary

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

4139.0' GR

22. APPROX. DATE WORK WILL START*

N/A

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-1/2"	10-3/4"	32	865'	good returns to surface, circulate
7-7/8"	4-1/2"	10.5	4152'	500' above top of pay

1. Spud well, drill 13-1/2" hole to 865', run 10-3/4" surface casing.
2. Drill 7-7/8" hole to 4152', checking B.O.P. Daily.
3. Run tests and logs as needed.
4. Run 4-1/2" production casing to 4152' if warranted.

5. Perforate and stimulate as needed.

B.O.P. Diagram Attached - Exhibit "A"

Gas is not dedicated.

NOTE: (This well was: Viking Petroleum, Inc. #1 Grynberg 32 State)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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

NANCY STOLZLE

TITLE

LAND MANAGER

DATE

2/10/82

(This space for Federal or State office use)

PERMIT NO.

APPROVED

APPROVAL DATE

APPROVED BY

(One Ind.) GEORGE H. STEWART

TITLE

DATE

CONDITIONS OF APPROVAL IF ANY: MAY 3 1982

APPROVAL FOR NON-STD LOCATION.

FOR

JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions On Reverse Side

5. LEASE DESIGNATION AND SERIAL NUMBER RECEIVED

USA-NM-28489

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

MAY - 4 1982

7. UNIT AGREEMENT NAME

N/A

O. C. D.

8. FARM OR LEASE NAME

ARTESIA, OFFICE

TROUT WELL FEDERAL

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Undesignated Abo

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

Sec. 29, T 5 S - R 24 E

12. COUNTY OR PARISH

Chaves

13. STATE

NM

MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form 2-77
September 1, 1977
Effective 1980

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

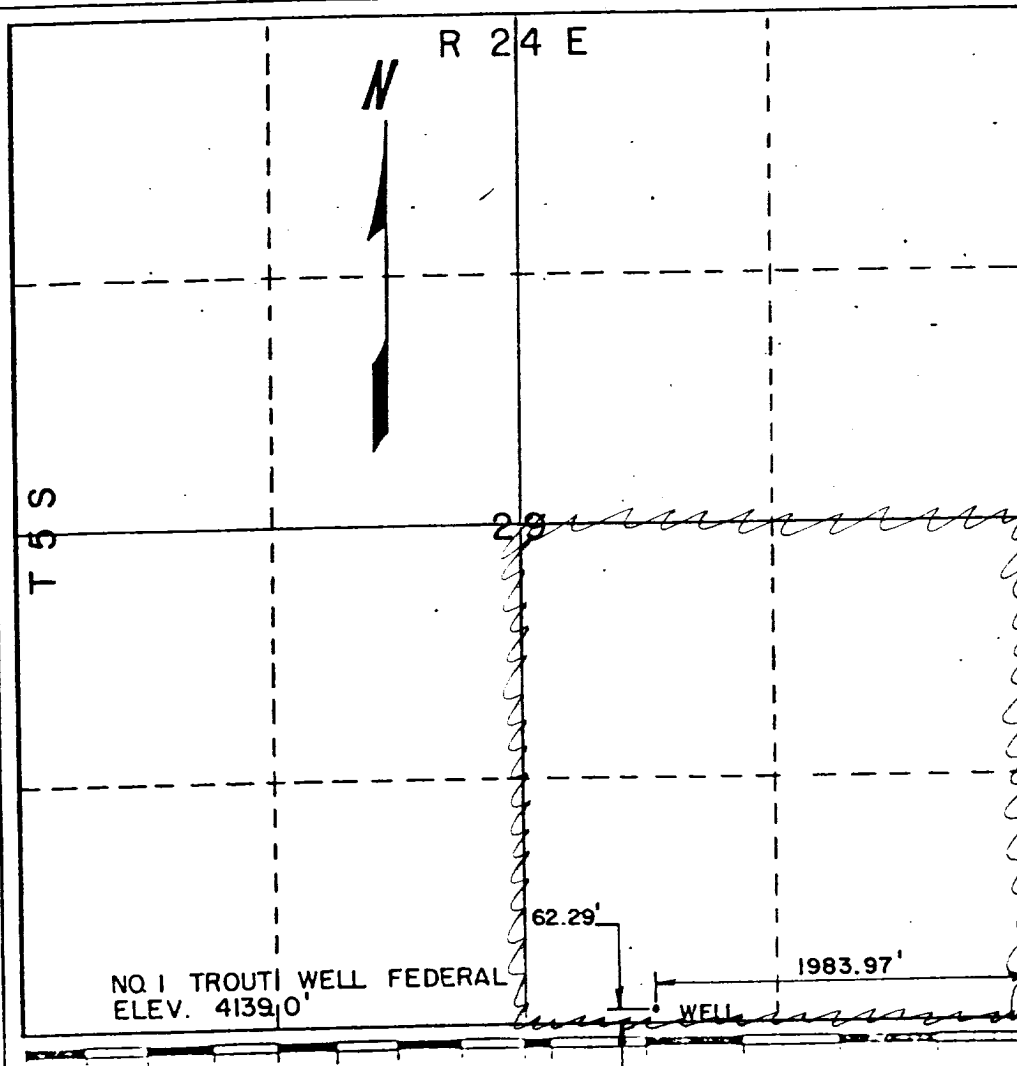
Jack Grynberg & Associates			Trout Well Federal		No. 1
was No. 1 Grynberg 32 State					
Unit Letter 0	Section 29	Range 5-S	Tract 24-E	Chaves	
Actual Footage Location of Well: 62.29 feet from the SOUTH line and 1983.97 feet from the EAST line					
Ground Level Elev. 4139.0'	Producing Formation Abo	Pool Undesignated Abo	Dedicated Acreage: 160 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat 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 communitization, 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 communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name
Agent

Position
Thomas T. Mann

Company
Jack Grynberg & Associates

Date
2-10-82

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 knowledge and belief.

8 February 1982

Date Surveyed
Thomas T. Mann
Registered Professional Engineer
and/or Land Surveyor

Thomas T. Mann, P.E. & L.S.

N.M. License No. 277

TEN POINT COMPLIANCE PROGRAM
Attachment to Form 9-133C, Application for Permit to Drill

Jack Grynberg and Associates
#1 Trout Well Federal
62.29' FSL and 1983.97' FEL
Section 29, T 5 S - R 24 E
Chaves County, New Mexico

1. Geologic Surface Formation

Sandy residuum

2. Estimated Tops of Important Geologic Marker

San Andres	580'
Glorieta	1445'
ABO	3610'
TD	4152'

3. Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals

Gas 3500'- 4152'

4. Proposed Casing Program

<u>HOLE SIZE</u>	<u>CASING SIZE</u>	<u>INTERVAL</u>	<u>GRADE</u>	<u>WT./FT.</u>	<u>NEW OR USED</u>
13-1/2"	10-3/4"	0-865	H-40	32	new
7-7/8"	4-1/2"	0-4152	J-55	10.5	new

5. Operator's Minimum Specifications For Pressure Control

Exhibit "A" is a schematic diagram of the blowout preventor equipment. The BOP's will be hydraulically tested to the full working pressure after nipping up and after any use under pressure. Pipe rams will be operationally checked each 24 hour period, as will blind rams each time pipe is pulled out of the hole.

6. Type and Characteristic of Proposed Circulating Mediums

Adequate stocks of sorptive agents will be on site to handle possible spills of fuel and oil on the surface. Heavier muds will be on location to be added if pressure requires.

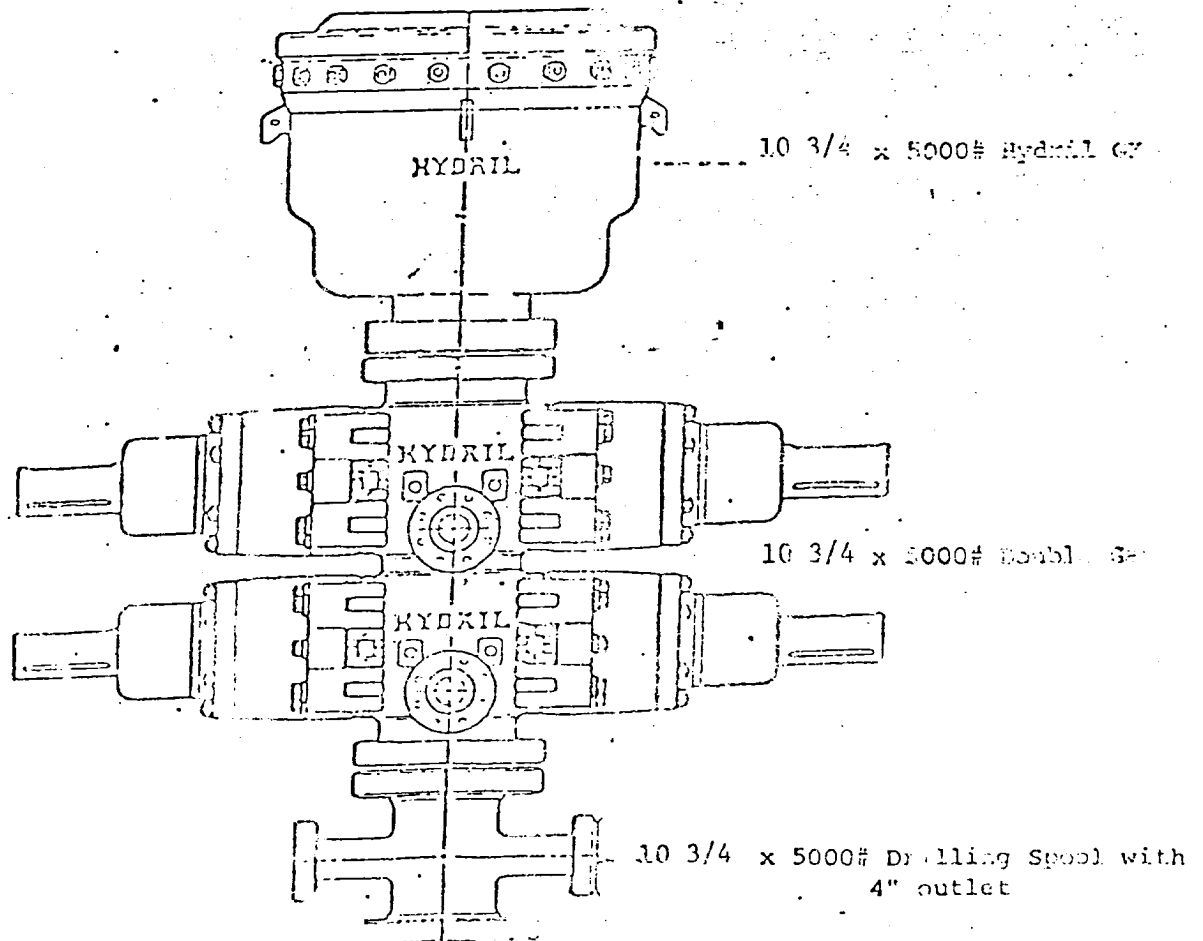
<u>INTERVALS</u>	<u>TYPE</u>	<u>WEIGHT #/GAL</u>	<u>VISC.-SEC./QT.</u>	<u>FLUID LOSS-CC</u>
0-865	native mud	-----	-----	-----
865-3200	native mud	-----	-----	-----
3200-TD salt base, 4-5% diesel fuel		10.1	32	14.8

7. Auxiliary Equipment
Kelly cock, a float will be used at the bit, pit level indicators and flow sensor equipment, sub with full-opening valve on floor, drill pipe connection.
8. Testing, Logging, and Coring Program
 - A. DST's as warranted.
 - B. The logging program will consist of a CNL-FDC and DLL-MSFL.
 - C. No coring is anticipated.
 - D. Stimulation procedures will be determined after evaluation of logs. If treatment is indicated, appropriate Sundry Notice will be submitted.
9. Anticipated Abnormal Pressures or Temperatures
No abnormal pressures or temperatures are anticipated.
10. The well was spudded December 12, 1981 as a result of a surveying error whereas the well was thought to be located 660' FNL and 1980' FEL of Section 32, T 5 S - R 24 E and drilled under an approved permit for the location.

EXHIBIT "A"

Jack Grynberg and Associates
#1 Trout Well Federal
62.29' FSL and 1983.97' FEL
Sec. 29, T 5 S - R 24 E
Chaves County, New Mexico

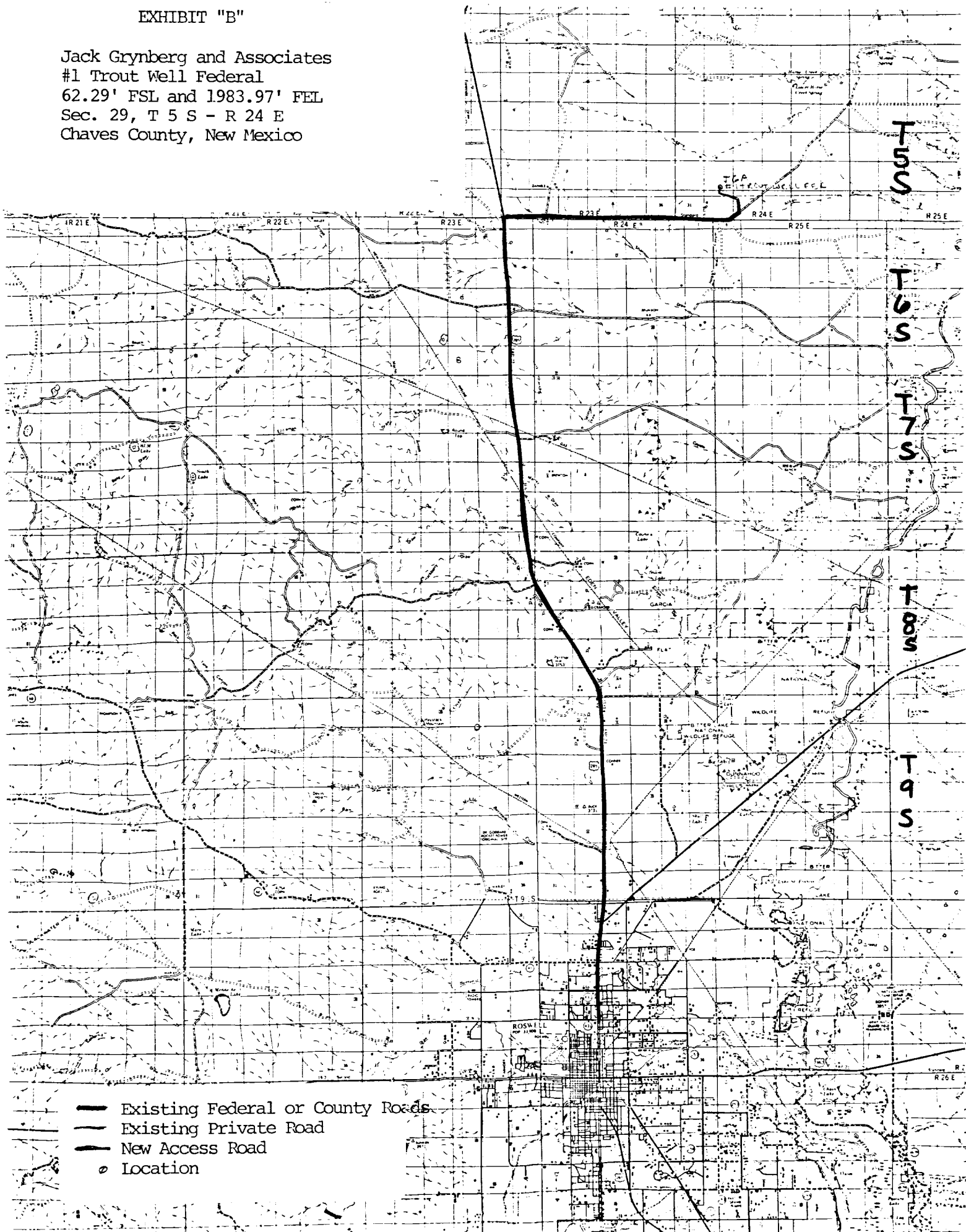
BOP Stack



All items H₂S trimmed

EXHIBIT "B"

Jack Grynberg and Associates
#1 Trout Well Federal
62.29' FSL and 1983.97' FEL
Sec. 29, T 5 S - R 24 E
Chaves County, New Mexico



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#1 Trout Well Federal
62.29' FSL and 1983.97' FEL
Sec. 29, T 5 S - R 24 E
Chaves County, New Mexico

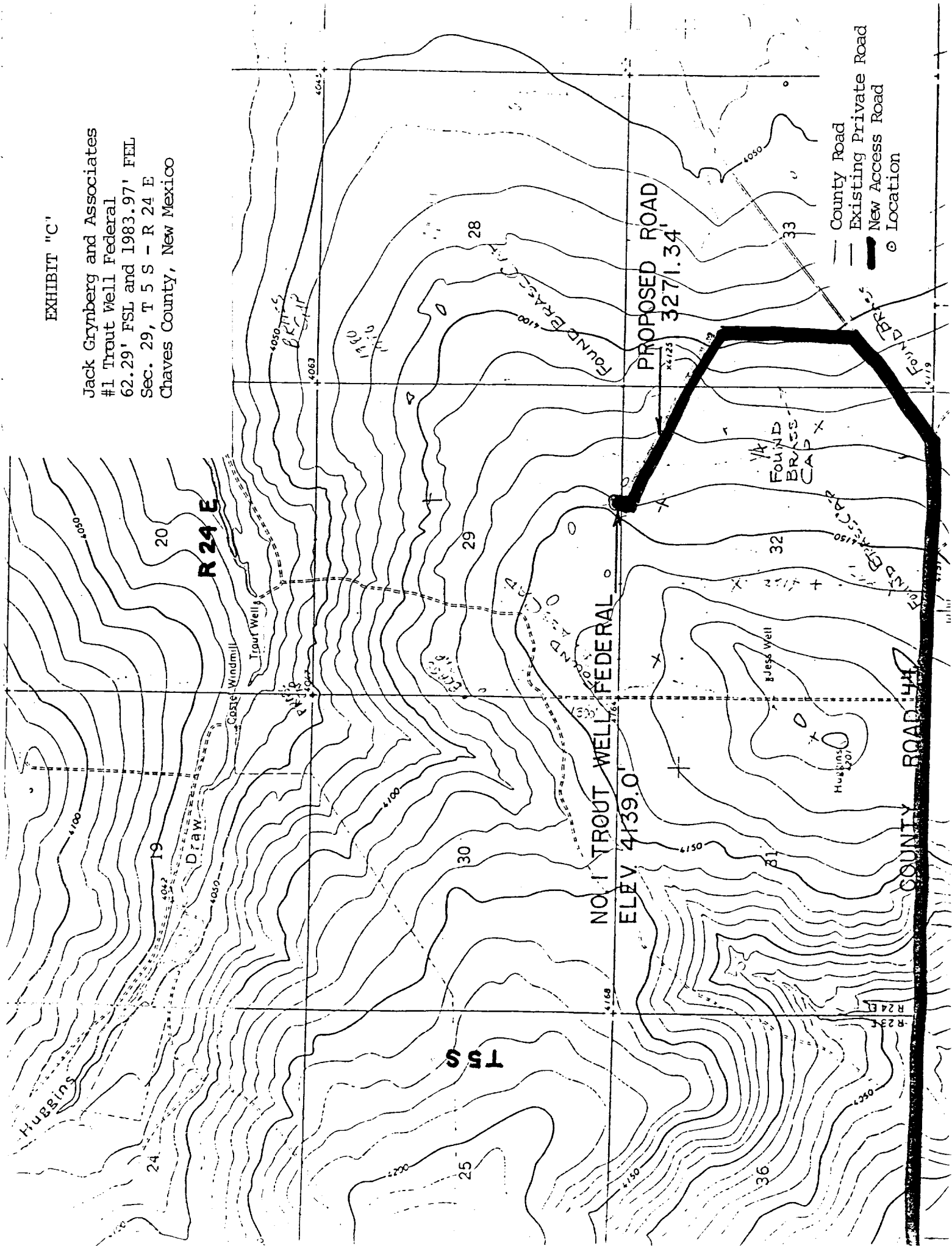
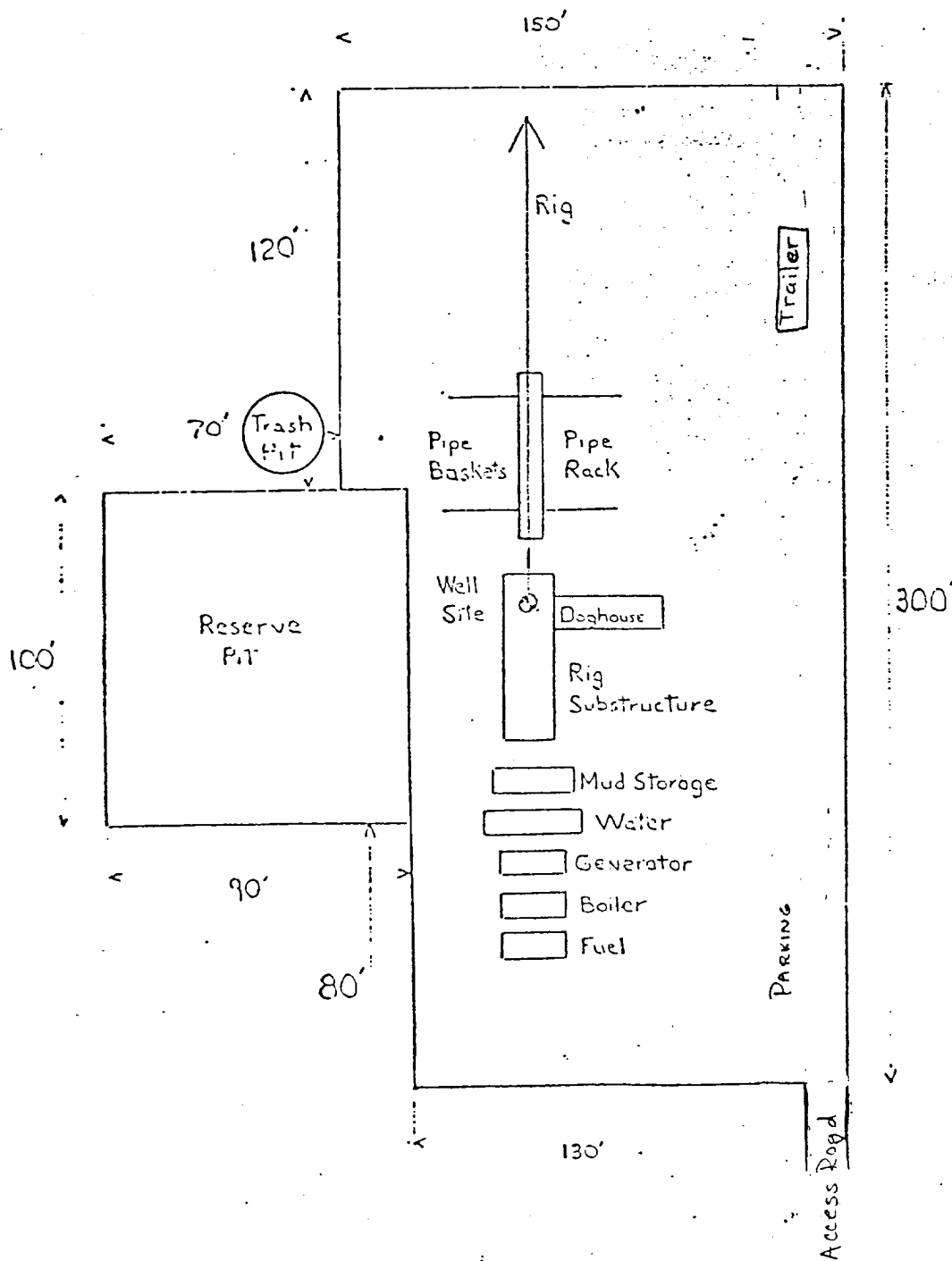


EXHIBIT "E"

Jack Grynberg and Associates
#1 Trout Well Federal
62.29' FSL and 1983.97' FEL
Sec. 29, T 5 S - R 24 E
Chaves County, New Mexico



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

RECEIVED

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

APR 19 1982

O. C. D.
ARTESIA, OFFICE

CASE No. 7496
Order No. R-6935

APPLICATION OF VIKING PETROLEUM, INC.
FOR AN UNORTHODOX LOCATION, CHAVES
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on March 16, 1982, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 9th day of April, 1982, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Viking Petroleum, Inc., seeks approval of an unorthodox gas well location for a well previously drilled at a point 62 feet from the South line and 1984 feet from the East line of Section 29, Township 5 South, Range 24 East, NMPM, to the Abo formation, Chaves County, New Mexico.

(3) That the SE/4 of said Section 29 is to be dedicated to the well.

(4) That the unorthodox location resulted from a surveying error.

(5) That the State Land Office as the owner of the royalty interest in Section 32 offsetting this well to the South objected to the proposed location.

(6) That unrestricted production from a well at the proposed location would result in drainage across the lease line from the State lease(s) to the South which would not be compensated for by counter drainage.

(7) That such uncompensated drainage would result in violation of correlative rights and injury to the State lease(s) in said Section 32.

(8) That to protect correlative rights and to prevent injury to the State lease(s) to the South, the production from the well at the proposed unorthodox location should be limited from the Abo formation.

(9) That the well at the proposed location is 94 percent closer to the South line of said Section 29 than permitted by the rules and regulations governing Abo formation gas wells in Chaves County.

(10) That the well at the proposed location will have a theoretical area of drainage in the Abo formation which extends 38 net acres into said Section 32, more than a well located at a standard location in said formation (24 percent).

(11) That the production limitation referred to in Finding No. (8) above should be based upon the variation of the location from a standard location and the 38 net-acre encroachment described in Finding No. (10) above, and may best be accomplished by assigning the well at the proposed location a production limitation factor of 0.41 (94 percent location factor plus a 24 percent net-acre encroachment factor divided by 2 subtracted from a 100 percent production factor).

(12) That in the absence of any special rules and regulations for the prorationing of production from the Abo formation in which the subject well is completed, the aforesaid production limitation factor should be applied against said well's ability to produce into the pipeline as determined by periodic well tests.

(13) That the minimum calculated allowable for the subject well should be reasonable, and 100,000 cubic feet of gas per day is a reasonable figure for such minimum allowable.

(14) That the Director of the Division should be authorized to administratively rescind the application of said production limitation upon a satisfactory showing that the State Land Office no longer objects to the unorthodox location sought by this application.

(15) That approval of the subject application subject to the above provisions and limitations will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject reservoir, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the

augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That Viking Petroleum, Inc. is hereby authorized an unorthodox Abo formation gas well location for a well previously drilled at a point 62 feet from the South line and 1984 feet from the East line of Section 29, Township 5 South, Range 24 East, NMPM, Chaves County, New Mexico.

(2) That the SE/4 of said Section 29 shall be dedicated to the above-described well.

(3) That said well is hereby assigned a Production Limitation Factor of 0.41 in the Abo formation.

(4) That in the absence of any Special Rules and Regulations prorating gas production in said Abo formation in which applicant's well is completed, the Special rules hereinafter promulgated shall apply.

(5) That the following Special Rules and Regulations for a non-prorated gas well at an unorthodox location shall apply to the subject well:

SPECIAL RULES AND REGULATIONS
FOR THE
APPLICATION OF A "PRODUCTION LIMITATION FACTOR"
TO A NON-PRORATED GAS WELL

APPLICATION OF RULES

RULE 1. These rules shall apply to the Viking Petroleum, Inc. Abo formation gas well located 62 feet from the South line and 1984 feet from the East line of Section 29, Township 5 South, Range 24 East, NMPM, Chaves County, New Mexico, which well's Production Limitation Factor of 0.41 shall be applied to the well's deliverability (as determined by the hereinafter set forth procedure) to determine its maximum allowable rate of production.

ALLOWABLE PERIOD

RULE 2. The allowable period for the subject well shall be six months.

RULE 3. The year shall be divided into two allowable periods commencing at 7:00 o'clock a.m. on January 1 and July 1.

DETERMINATION OF DELIVERY CAPACITY

RULE 4. Immediately upon connection of the well the operator shall determine the open flow capacity of the well in accordance with the Division "Manual for Back-Pressure Testing of Natural Gas Wells" then current, and the well's initial deliverability shall be calculated against average pipeline pressure in the manner described in the last paragraph on Page I-6 of said test manual.

RULE 5. The well's "subsequent deliverability" shall be determined twice a year, and shall be equal to its highest single day's production during the months of April and May or October and November, whichever is applicable. Said subsequent deliverability, certified by the pipeline, shall be submitted to the appropriate District Office of the Division not later than June 15 and December 15 of each year.

RULE 6. The Division Director may authorize special deliverability tests to be conducted upon a showing that the well has been worked over or that the subsequent deliverability determined under Rule 5 above is erroneous. Any such special test shall be conducted in accordance with Rule 4 above.

RULE 7. The operator shall notify the appropriate district office of the Division and all offset operators of the date and time of initial or special deliverability tests in order that the Division or any such operator may at their option witness such tests.

CALCULATION AND ASSIGNMENT OF ALLOWABLES

RULE 8. The well's allowable shall commence upon the date of connection to a pipeline and when the operator has complied with all appropriate filing requirements of the Rules and Regulations and any special rules and regulations.

RULE 9. The well's allowable during its first allowable period shall be determined by multiplying its initial deliverability by its production limitation factor.

RULE 10. The well's allowable during all ensuing allowable periods shall be determined by multiplying its latest subsequent deliverability, as determined under provisions of Rule 5, by its production limitation factor. If the well shall not have been producing for at least 60 days prior to the end of its first allowable period, the allowable for the second allowable period shall be determined in accordance with Rule 9.

RULE 11. Revision of allowable based upon special well tests shall become effective upon the date of such test provided the results of such test are filed with the Division's district office within 30 days after the date of the test; otherwise the date shall be the date the test report is received in said office.

RULE 12. Revised allowables based on special well tests shall remain effective until the beginning of the next allowable period.

RULE 13. In no event shall the well receive an allowable of less than 100,000 cubic feet of gas per day.

BALANCING OF PRODUCTION

RULE 14. January 1 and July 1 of each year shall be known as the balancing dates.

RULE 15. If the well has an underproduced status at the end of a six-month allowable period, it shall be allowed to carry such underproduction forward into the next period and may produce such underproduction in addition to its regularly assigned allowable. Any underproduction carried forward into any allowable period which remains unproduced at the end of the period shall be cancelled.

RULE 16. Production during any one month of an allowable period in excess of the monthly allowable assigned to the well shall be applied against the underproduction carried into the period in determining the amount of allowable, if any, to be cancelled.

RULE 17. If the well has an overproduced status at the end of a six-month allowable period, it shall be shut in until such overproduction is made up.

RULE 18. If, during any month, it is discovered that the well is overproduced in an amount exceeding three times its average monthly allowable, it shall be shut in during that month and during each succeeding month until it is overproduced in an amount three times or less its monthly allowable, as determined hereinabove.

RULE 19. The Director of the Division shall have authority to permit the well, if it is subject to shut-in pursuant to Rules 17 and 18 above, to produce up to 500 MCF of gas per month upon proper showing to the Director that complete shut-in would cause undue hardship, provided however, such permission shall be

rescinded for the well if it has produced in excess of the monthly rate authorized by the Director.

RULE 20. The Division may allow overproduction to be made up at a lesser rate than permitted under Rules 17 or 18 above upon a showing that the same is necessary to avoid material damage to the well.

GENERAL

RULE 21. Failure to comply with the provisions of this order or the rules contained herein or the Rules and Regulations of the Division shall result in the cancellation of allowable assigned to the well. No further allowable shall be assigned to the well until all rules and regulations are complied with. The Division shall notify the operator of the well and the purchaser, in writing, of the date of allowable cancellation and the reason therefor.

IT IS FURTHER ORDERED:

(1) That the Director of the Division shall rescind the application of the production limitation factor and of the special rules contained in this order upon a proper showing that the State Land Office has withdrawn objection to the unorthodox gas well location granted by this order.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
JOE D. KAMEY,
Director

S E A L