



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

May 14, 1997

**Rand Paulson Oil Company, Inc.
c/o J. W. Mulloy Associates, Inc.
Engineering & Consulting
508 W. Wall - Suite 100
Midland, Texas 79701
Attention: Hudson Routh**

Administrative Order DD-170

Dear Mr. Routh:

Reference is made to your application on behalf of the operator Rand Paulson Oil Company, Inc. dated May 13, 1997 for approval to recompleate its Nicholas "31" (Federal) Well No. 1 (API No. 30-025-33822), located on the surface 2090 feet from the North line and 660 feet from the East line (Unit H) of Section 31, Township 14 South, Range 35 East, NMPM, to test the Strawn formation, Lea County, New Mexico.

The Division Director Finds That:

- (1) The application has been duly filed under the provisions of **Rule 111.D** and **E** of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995;
- (2) The subject well was spudded March 21, 1997 and just recently reached total depth, the lower Pennsylvanian interval tested non-commercial and the operator now seeks to plug back and directionally drill to the southwest and test the Strawn formation in the NW/4 SE/4 (Unit J) of said Section 31;
- (3) The Strawn formation within this area is subject to the statewide rules and regulations for oil wells, as promulgated by **Rules 104.B(1)(b)**, which provides for 40-acre oil spacing and proration units, or drilling units, and requires that wells be located no closer than 330 feet to any boundary of such tract;
- (4) The 40-acre tract comprising the NW/4 SE/4 of said Section 31 is to be dedicated

to said well to form a standard oil spacing and proration unit for said pool;

- (5) The operator proposes to plug the vertical hole to a depth of 6,600 feet, kick-off at a depth of approximately 6,700 feet, drill in a southwesterly direction, build to an angle of approximately 21 degrees and continue drilling in such a manner as to bottom back into the Strawn formation, with total horizontal displacement of said wellbore to be approximately 1700 feet;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the NW/4 SE/4 of said Section 31 that is no closer than 330 feet to the outer boundary of said dedicated 40-acre tract; and,
- (7) It appearing the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) Rand Paulson Oil Company, Inc. is hereby authorized to recomplete its existing Nicholas "31" (Federal) Well No. 1 (API No. 30-025-33822), located on the surface 2090 feet from the North line and 660 feet from the East line (Unit H) of Section 31, Township 14 South, Range 35 East, NMPM, Lea County, New Mexico, by plugging the vertical well back to an approximate depth of 6,600 feet, kick-off at a depth of approximately 6,700 feet, drill in a southwesterly direction, build to an angle of approximately 21 degrees and continue drilling in such a manner as to bottom back into the Strawn formation, with total horizontal displacement of said wellbore to be approximately 1700 feet.

(2) The 40-acre tract comprising the NW/4 SE/4 of said Section 31 shall be dedicated to said well to form a standard oil spacing and proration unit for said formation.

(3) The applicable drilling window or "producing area" for said wellbore shall consist of that area within the NW/4 SE/4 of said Section 31 that is no closer than 330 feet to the outer boundary of said dedicated 40-acre tract.

PROVIDED HOWEVER THAT prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

PROVIDED FURTHER THAT during or upon completion of said directional drilling

operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(4) The applicant shall notify the supervisor of the Hobbs District office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Hobbs offices of the Division upon completion.

(5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(6) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.

(7) 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


WILLIAM J. LEMAY
Director

S E A L

cc: Oil Conservation Division - Hobbs
U. S. Bureau of Land Management - Carlsbad
U. S. Bureau of Land Management - Roswell

DD-01C

Rec: 5-13-97

Susp: NA

Released: 5-14-97

May 14, 1997

Rand Paulson Oil Company, Inc.
c/o J. W. Mulloy Associates, Inc.
Engineering & Consulting
508 W. Wall - Suite 100
Midland, Texas 79701

Attention: Hudson Routh

170
Administrative Order DD-***

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to said well to form a standard oil spacing and proration unit for said pool;

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PROVIDED FURTHER THAT during or upon completion of said directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(4) The applicant shall notify the supervisor of the Hobbs District office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Hobbs offices of the Division upon completion.

(5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(6) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.

(7) 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

WILLIAM J. LEMAY
Director

S E A L

cc: Oil Conservation Division - Hobbs
U. S. Bureau of Land Management - Carlsbad
U. S. Bureau of Land Management - Roswell

J.W. MULLOY ASSOCIATES, INC.*Engineering & Consulting*

508 W. Wall • Suite 100

Midland, Texas 79701

Phone: (915) 687-0323

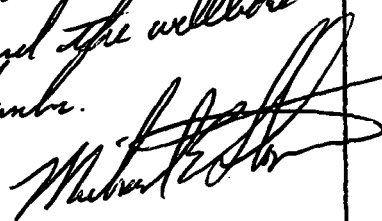
Fax: (915) 686-7224

JOHNNY MULLOY*President***HUDSON ROUTH***Vice President***FAX NUMBER 915/686-7224****FAX COVER PAGE****NUMBER OF PAGES IN TRANSMISSION 3 (INCLUDING COVER PAGE)****TO:** MICHAEL STOGER
(NAME)**FROM:** HUDSON ROUTH
(NAME)**IF THERE ARE ANY PROBLEMS WITH DOCUMENTS RECEIVED, PLEASE
CONTACT OUR OFFICE IN MIDLAND BY CALLING 915/687-0323.****THANK YOU****J.W. MULLOY ASSOCIATES, INC.**

5-13-98

1:42 PM

Please refer the subject of this
pursuant to the attached rules and
reg. In the reply please indicate
the extent of the subject law, the
indent formation, and the willmore
signature. Thanks.



05/13/1997 13:43 972-717-9798

RAND PAULSON OIL CO

PAGE 02

EGCRAND
PAULSON
EXPLORATORY
OIL
COMPANY

May 13, 1997

Mr. Mike Stogner
State of New Mexico
Oil Conservation Division
Santa Fe, New Mexico

RE: Nicholas 31 Well No. 1
NW/4 SE/4 Section 31-T14S-R35E
Lea County, New Mexico

Dear Mr. Stogner:

Rand Paulson Oil Company, Inc. hereby requests a permit to drill the referenced well from a surface location of 2090 feet from the North Line and 660 feet from the East Line to a bottom hole location of 1980 feet from the South Line and 1650 feet from the East Line. The total vertical depth on this well will be 11,900 feet.

There are no offset operators other than Rand Paulson Oil Company, Inc.

Enclosed is our Form C-102.

Very truly yours,



David Brooks
Land Manager

05/13/1997 11:36

972-717-9798

WH115

RAND PAULSON OIL CO

FAX 505-623-5702

PAGE 03

PAGE 01

DISTRICT I

P.O. Box 1088, Santa Fe, NM 87501-1088

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1996

Submit to Appropriate District Office

State License - 4 Copies

Fee License - 2 Copies

DISTRICT II

P.O. Drawer 80, Artesia, NM 87011-0710

DISTRICT III

1000 New Mexico Ave., Santa Fe, NM 87510

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

AMENDED REPORT

DISTRICT IV

P.O. Box 8888, Santa Fe, NM 87501-8888

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Undesignated	Pool Name
Property Code	Property Name NICHOLAS 31		Well Number 1
OPRID No	Operator Name RAND PAULSON OIL COMPANY, INC.		Elevation 4042

Surface Location

UL or Lot No.	Section	Township	Range	Lot No.	Feet from the	North/South Line	Feet from the	East/West Line	County
H	31	14 S	35 E		2090	NORTH	660	EAST	LEA

Bottom Hole Location if Different From Surface

UL or Lot No.	Section	Township	Range	Lot No.	Feet from the	North/South Line	Feet from the	East/West Line	County
J	31	14S	35E		1980	SOUTH	1650	EAST	LEA
Dedicated Area	Joint or Lateral	Consolidation Code	Order No.						

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

		<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>[Signature]</i> Signature O.H. ROUTH- Printed Name AGENT Rand Paulson Oil Company, Inc. Title 5-13-97 Date</p>
<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JAN. 3, 1997 Date Surveyed</p> <p>FRANK D. BRADSON Signature Professional Surveyor NEW MEXICO 11-11-0006 Surveyor No. 10861 Surveyor License No. 10861</p>		<p>DMCC</p> <p>06-97</p> <p>876 3224 12641</p>

Pen (Strawn) oil Wildcat

9500
10600
5800'

above the projected depth of the well and in all areas where pressures which will be encountered are unknown, and on all workover rigs working on wells in which high pressures are known to exist. [10-22-74...2-1-96]

109.B. Blowout preventers shall be installed and maintained in good working order on all drilling rigs and workover rigs operating within the corporate limits of any city, town, or village, or within 1320 feet of habitation, school, or church, wherever located. [10-22-74...2-1-96]

109.C. All operators, when filing Form C-101, Application for Permit to Drill, Deepen, or Plug Back, or Form C-103, Sundry Notices, for any operation requiring blowout prevention equipment in accordance with Sections A. and B. above, shall submit a proposed blowout prevention program for the well. The program as submitted may be modified by the District Supervisor if, in his judgement, such modification is necessary. [10-22-74...2-1-96]

110 PULLING OUTSIDE STRINGS OF CASING

In pulling outside strings of casing from any oil or gas well, the space outside the casing left in the hole shall be kept and left full of mud-laden fluid or cement of adequate specific gravity to seal off all fresh and salt water strata and any strata bearing oil or gas not producing. [1-1-50...2-1-96]

111 DEVIATION TESTS/DEVIATED WELLS AND DIRECTIONAL WELLS

111.A. Definitions: the following definitions shall apply to this Rule:

(1) Deviated Well - means any wellbore which is intentionally deviated from vertical but not with an intentional azimuth. Any deviated well is subject to Rule 111-B and C. [7-26-95, 2-1-96]

(2) Directional Well - means a wellbore which is intentionally deviated from vertical with an intentional azimuth. Any directional well is subject to Rule 111-D. [7-26-95, 2-1-96]

(3) Vertical Well - means a well that does not have an intentional departure or course deviation from the vertical. [7-26-95, 2-1-96]

(4) Drilling Unit - means the surface acreage assigned to a vertical wellbore in accordance with NMOC Rule 104. Included in this definition is a "unit of proration for oil or gas" as defined by the Division and all non-standard such units previously approved by the Division. [7-26-95, 2-1-96]

(5) Wellbore - means the interior surface of a cased or open hole through which drilling, production, or injection operations are conducted. [7-26-95; 2-1-96]

(6) Project Well - means any well drilled, completed, produced or injected into as either a deviated well or as a directional well. [7-26-95, 2-1-96]

(7) Project Area - means one or more drilling units which are to be dedicated to the project well. [7-26-95, 2-1-96]

(8) Producing Area - means all points that lie along a rectangular or square window formed by plotting the measured distance from the North, South, East and West boundaries of a project area inside of which a vertical wellbore can be drilled and produced in conformity with the setback requirements from the outer boundary of a standard spacing and proration unit for the applicable

pool(s). [7-26-95, 2-1-96]

(9) Penetration Point - means the point where the wellbore penetrates the top of the pool from which it is intended to produce. [7-26-95, 2-1-96]

(10) Azimuth - means the deviation in the horizontal plane of a wellbore expressed in terms of compass degrees. [7-26-95, 2-1-96]

(11) Kick-off Point - means the point at which the wellbore is intentionally deviated from vertical. [7-26-95, 2-1-96]

(12) Terminus - means the farthest point attained along the wellbore. [7-26-95, 2-1-96]

(13) Producing Interval - means that portion of the wellbore drilled inside the vertical limits of a pool, between its penetration point and its terminus and within the producing area. [7-26-95, 2-1-96]

(14) Lateral - means any portion of a wellbore past the point where the wellbore has been intentionally departed from the vertical. [7-26-95, 2-1-96]

111.B. Deviation Tests:

Any well which is drilled or deepened shall be tested at reasonably frequent intervals to determine the deviation from the vertical. Such tests shall be made at least once each 500 feet or at the first bit change succeeding 500 feet. A tabulation of all deviation tests run, sworn to and notarized, shall be filed with Form C-104, Request for Allowable and Authorization to Transport Oil and Natural Gas. When the deviation averages more than five degrees in any 500-foot interval, the operator shall include the calculations of the maximum possible horizontal displacement of the hole and the Division Director may require that a directional survey be run to establish the location of the producing interval(s). Upon request from the Division Director, any well which was deviated in an indeterminate direction or toward the vertical shall be directionally surveyed. [7-26-95, 2-1-96]

111.C. Deviated Wellbores:

(1) The Supervisor of the appropriate Division District may approve the written request of an operator to drill a deviated wellbore or to deviate an existing wellbore to:

- (a) straighten a crooked hole by deviating towards the vertical;
- (b) side track junk in the hole by deviating in an indeterminate direction (no intentional azimuth);
- (c) side track an existing wellbore by deviating in an indeterminate direction (no intentional azimuth) for the purpose of recompleting into an existing producing formation or plugging the originally completed formation and recompleting into a different formation.

[7-26-95, 2-1-96]

(2) The Supervisor of the appropriate Division District may require any request for a deviated well to be submitted for administrative approval by the Division Director. [7-26-95, 2-1-96]

(3) Applications for administrative approval for a deviated

well shall:

- (a) be filed in duplicate and shall be accompanied by plats showing both the surface location of the subject well, its spacing unit and all adjoining spacing units;
- (b) state the reason(s) for deviating the subject well; and
- (c) shall include a statement or plat showing the names and addresses of all operators of spacing units, or working interest owners of undrilled spacing units offsetting the unit in which the project is located and attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to all those parties by submitting a copy of the application to them by certified mail return receipt requested and advising them that if they have an objection, it must be filed in writing within twenty (20) days of the date notice was sent.

[7-26-95, 2-1-96]

(4) The bottomhole location of any deviated well shall be at an orthodox well location or an unorthodox location previously approved pursuant to Rule 104 and shall be considered acceptable if the actual subsurface location in the formation to be produced is orthodox or is no more than 50 feet from the approved subsurface location. [7-26-95, 2-1-96]

(5) The Division Director may approve the application for a deviated well upon receipt of waivers from all offset operators or owners of undrilled tracts or if no offset operator or owner has entered an objection to the project within 20 days after the application was received by the Director. [7-26-95, 2-1-96]

111.D. Directional Wellbore:

(1) The Division Director, shall have the authority without notice and hearing to administratively approve a directional wellbore project when:

- (a) the surface location of the proposed or existing project well is within the boundaries of the project area, consisting of a single or multiple drilling unit(s), substantially in the form of either a square or a rectangle, as applicable, being a legal subdivision of the U.S. Public Land Survey;
- (b) the producing interval of the wellbore(s) is totally confined to a producing area. The wellbore(s) may be re-oriented to any azimuth based upon a change in conditions either geologic or mechanical, which is encountered either before or after the commencement of a project, but only insofar as the producing interval(s) remains totally confined to the producing area;
- (c) the project area includes either a single drilling unit or multiple contiguous drilling units; and,
- (d) the project well includes either a single lateral or multiple laterals which conform to conditions

(a) and (b) above.

[7-26-95, 2-1-96]

(2) To obtain administrative approval to drill a directional well, the applicant shall file a written application in duplicate with the Division Director, copy to the appropriate OCD District Supervisor, which shall include:

- (a) a statement addressing the reason(s) for directionally drilling the subject well;
- (b) a plat indicating the section, township and range in which the well is to be drilled, the project area, the proposed surface location, the producing area for the project well, any existing wells in the applicable pool(s) in the proposed project area, all offsetting drilling units in the applicable pool(s) and their associated operator, and any wells in those units;
- (c) a vertically oriented plan view (cross-sectional view) for the subject well including the true vertical depth of the top and bottom of the subject pool, degree of angle to be built in the project wellbore(s), the true vertical and the measured depth of the estimated kickoff point, the estimated penetration point and the lateral length;
- (d) a horizontal plan view for the subject well and its spacing unit showing the drilling unit and drilling-producing window, including the estimated azimuth and maximum length of the lateral(s) to be drilled;
- (e) a type log section on which is identified the top and bottom of the subject pool; and,
- (f) a statement or plat showing the names and addresses of all operators of spacing units, or working interest owners of undrilled spacing units offsetting the unit in the applicable pool(s) in which the project is located and attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to all those parties by submitting a copy of the application to them by certified mail return receipt requested and advising them that if they have an objection, it must be filed in writing within twenty (20) days of the date notice was sent.

[7-26-95, 2-1-96]

(3) The maximum allowable assigned to the project area when dealing with prorated pools shall be based upon of the number of standard proration units (or approved non-standard proration and spacing units) for that pool any portion of which is within a distance of the producing lateral of the directional wellbore not greater than the footage setback distance for locating a vertical well from the outer boundary of a spacing unit for that pool. [7-26-95, 2-1-96]

111.E. Requirements/Conditions of Administrative Approval:

(1) The Division Director may approve the application upon receipt of waivers from all offset operators or owners of undrilled tracts or if no offset operator or owner has entered an objection to the project within 20 days

after the application was received by the Director. [7-26-95, 2-1-96]

(2) Any order issued by the Director approving an application for a directional wellbore shall require that:

- (a) the applicant shall conduct a directional survey on the wellbore after directional drilling operations in order that the direction, extent and terminus of said wellbore may be determined to be in compliance with the provision of any order with copies submitted to the Santa Fe NMOCD and to the NMOCD-district office in which the well is located; and,
- (b) the Supervisor of the appropriate Division District shall be notified of the approximate time all directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the Division upon completion of the well. The Division shall not assign an allowable to a well until the operator has submitted an affidavit that all such directional surveys have been filed.

[7-26-95, 2-1-96]

111.F. Additional Matters:

(1) The Division Director, at the request of an offset operator, may require any operator to make a directional survey of any well. The directional survey and all associated costs shall be at the expense of the requesting party and shall be secured in advance by a \$5,000 indemnity bond posted with and approved by the Division. The requesting party may designate the well survey company and the survey may be witnessed by the Division and the operator. [8-28-62...2-1-96]

(2) The Division Director, may, at his discretion, set any application for administrative approval for public hearing. [3-2-84...2-1-96]

(3) Permission to deviate or directionally drill any wellbore for any reason or in any manner not provided for in this rule shall be granted only after notice and hearing. [3-2-84...2-1-96]

112-A MULTIPLE COMPLETIONS

112-A.A. The multiple completion of any well may be permitted only as hereinafter provided. Multiple completion of any well without prior approval by the Division shall be solely at the operator's risk and shall in no way commit the Division to subsequent approval thereof. [7-3-58...2-1-96]

112-A.B. District Approval

(1) The Supervisor of the appropriate Division district may authorize the multiple completion (qualifying conventional, tubingless, or combination) whenever the zones to be completed are to be produced through tubing or through casing where such casing has an outside diameter of 2.875 inches or less. The supervisor may authorize one gas zone to be produced through a casing-tubing annulus if such zone produces no more than one barrel of liquids per day. [2-1-82...2-1-96]

(2) To obtain approval for multiple completion the operator shall file four copies of Division Form C-107 (Application for Multiple Completion) with the appropriate district office. Form C-107 shall be accompanied by a diagrammatic sketch of the Multiple Completion, showing all casing strings, including diameters

J.W. MULLOY ASSOCIATES, INC.*Engineering & Consulting*

508 W. Wall *Suite 100

Midland, Texas 79701

Phone: (915) 687-0323

Fax: (915) 686-7224

JOHNNY MULLOY*President***HUDSON ROUTH***Vice President***FAX NUMBER 915/686-7224****FAX COVER PAGE****NUMBER OF PAGES IN TRANSMISSION 5 (INCLUDING COVER PAGE)****TO:** MICHAEL STOGER
(NAME)**FROM:** HUDSON ROUTH
(NAME)**IF THERE ARE ANY PROBLEMS WITH DOCUMENTS RECEIVED, PLEASE
CONTACT OUR OFFICE IN MIDLAND BY CALLING 915/687-0323.****THANK YOU****J.W. MULLOY ASSOCIATES, INC.**



DIRECTIONAL
INVESTMENT
GUIDANCE, INC.

P.O. BOX 7238

MIDLAND, TEXAS 79708

915/697-1490

May 9, 1997

Rand Paulson Oil Co., Inc.
212 N. Main, Suite 200
Midland, Texas 79701

Attn.: Mr. J. W. Mulloy

Re: Nicholas Well No. 1
Lea County, New Mexico

Dear Mr. Mulloy:

In response to your request for a cost estimate for directional drilling services on the Nicholas Well No. 1 well located in Lea County, New Mexico, we respectfully submit the following proposal. Our proposal assumes that a Conventional mud motor and bent sub assembly with a steering tool will be used to sidetrack the wellbore and make the build-up and deflection run. The hold section of the wellbore will be drilled with Conventional Rotary Drilling Assemblies. The Conventional mud motor and Bent sub assembly with a steering tool will be used to make necessary corrective tool runs.

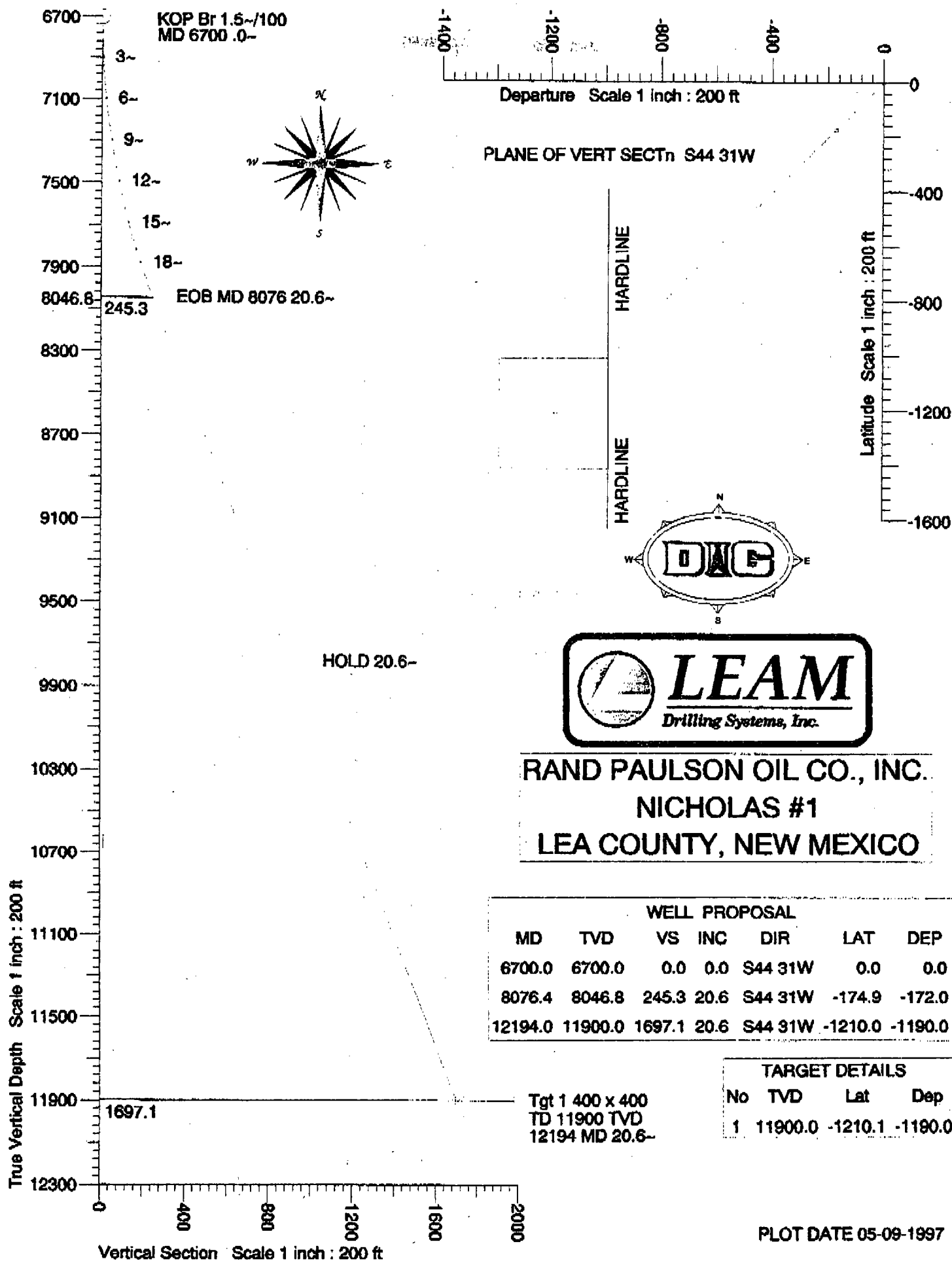
DIRECTIONAL RECOMMENDED PROCEDURE

1. Set good quality cement plug from 6900' to 6600' and wait on cement 24 hours.
2. Go in hole with 7-7/8" Bit, Drill Collars and drill pipe and dress cement plug down to 6700'. While in hole, run Gyro Directional Survey on Wireline.
3. Go in hole with 7-7/8" Diamond Sidetrack Bit, 6-1/2" Hi Speed Mud Motor, deflection sub, 6-1/4" X 30' Non Mag Drill Collar, Drill Collars and drill pipe. Orient this assembly to hole direction and time drill 1' per hour for eight foot to get full bit pattern out into formation. Continue drilling a total of 60' to get full separation between wellbores. Trip out of hole for clean up and reaming run.

Mr. J. W. Mulloy
Rand Paulson Oil Co., Inc.
MAY 9, 1997
Page 2

4. Go in hole with 7-7/8" reamer with circulating bull plug, drill collars and drill pipe.
Ream sidetracked hole to bottom and trip out of hole for a deflecting assembly.
5. Go in hole with 7-7/8" bit, 6-1/2" Slo speed motor, Bent sub, 6-1/4" X 30' non magnetic drill collar, drill collars and drill pipe. Orient this assembly and drill approximately 500' to deflect wellbore with approximately 8° angle and hole direction. Trip out of hole for angle building assembly.
6. Go in hole with 7-7/8" bit, 7-7/8" bottom hole 6 point roller reamer 6-1/4" X 30' non magnetic drill collar, 1 (one) 30' drill collar, 7-7/8" string IB stabilizer, 1 (one) 30' drill collar, 7-7/8" string IB stabilizer, drill collars, drilling jars and drill pipe. Drill with this assembly and build angle at the rate of 1-1/2° per 100' to a true vertical depth of 8047' and/or 8076' measured depth and an average angle of 20.65° is obtained or until a corrective motor run is needed. Trip out of hole for a semi-packed assembly.
7. Go in hole with 7-7/8" bit, 7-7/8" bottom hole 6 point roller reamer, 6-1/4" X 30' non magnetic drill collar, 7-7/8" string IB stabilizer, 1 (one) 30' drill collar, 7-7/8" string IB stabilizer, drill collars, drilling jars and drill pipe. Drill with this assembly to 11,900' true vertical depth and/or 12,194' measured depth maintaining an average angle of 20.65° or until a corrective motor run is needed. If a corrective motor run is needed, repeat procedure number 5.

NOTE: DROP MAGNETIC MULTISHOT SURVEY ON TRIP OUT OF HOLE.



NICHOLAS NICHOLAS #1 5-9-97
Plane of Vertical Section 224.52

Section 1 (Const Dogleg)

MD	Inc	Dir	Tvd	Vsec	Lat	Dep	Values to be applied			
							Build	Turn	Dleg	T Face
6700.0	0.00	224.52	6700.0	0.0	0.0	0.0	1.5	0.0	1.5	0.0
6800.0	1.50	224.52	6800.0	1.3	-0.9	-0.9	1.5	0.0	1.5	0.0
7000.0	4.50	224.52	6999.7	11.8	-8.4	-8.3	1.5	0.0	1.5	0.0
7200.0	7.50	224.52	7198.6	32.7	-23.3	-22.9	1.5	0.0	1.5	0.0
7400.0	10.50	224.52	7396.1	64.0	-45.6	-44.8	1.5	0.0	1.5	0.0
7600.0	13.50	224.52	7591.7	105.5	-75.2	-74.0	1.5	0.0	1.5	0.0
7800.0	16.50	224.52	7784.9	157.3	-112.2	-110.3	1.5	0.0	1.5	0.0
8000.0	19.50	224.52	7975.0	219.1	-156.2	-153.6	1.5	0.0	1.5	0.0

Section 2 (Hold Section)

MD	Inc	Dir	Tvd	Vsec	Lat	Dep	Values to be applied			
							Build	Turn	Dleg	T Face
8076.4	20.65	224.52	8046.8	245.3	-174.9	-172.0	0.0	0.0	0.0	0.0
8200.0	20.65	224.52	8162.5	288.9	-206.0	-202.6	0.0	0.0	0.0	0.0
8400.0	20.65	224.52	8349.6	359.4	-256.3	-252.0	0.0	0.0	0.0	0.0
8600.0	20.65	224.52	8536.8	429.9	-306.5	-301.4	0.0	0.0	0.0	0.0
8800.0	20.65	224.52	8723.9	500.4	-356.8	-350.9	0.0	0.0	0.0	0.0
9000.0	20.65	224.52	8911.1	571.0	-407.1	-400.3	0.0	0.0	0.0	0.0
9200.0	20.65	224.52	9098.2	641.5	-457.4	-449.8	0.0	0.0	0.0	0.0
9400.0	20.65	224.52	9285.4	712.0	-507.7	-499.2	0.0	0.0	0.0	0.0
9600.0	20.65	224.52	9472.6	782.5	-557.9	-548.7	0.0	0.0	0.0	0.0
9800.0	20.65	224.52	9659.7	853.0	-608.2	-598.1	0.0	0.0	0.0	0.0
10000.0	20.65	224.52	9846.9	923.5	-658.5	-647.6	0.0	0.0	0.0	0.0
10200.0	20.65	224.52	10034.0	994.1	-708.8	-697.0	0.0	0.0	0.0	0.0
10400.0	20.65	224.52	10221.2	1064.6	-759.0	-746.4	0.0	0.0	0.0	0.0
10600.0	20.65	224.52	10408.3	1135.1	-809.3	-795.9	0.0	0.0	0.0	0.0
10800.0	20.65	224.52	10595.5	1205.6	-859.6	-845.3	0.0	0.0	0.0	0.0
11000.0	20.65	224.52	10782.7	1276.1	-909.9	-894.8	0.0	0.0	0.0	0.0
11200.0	20.65	224.52	10969.8	1346.6	-960.2	-944.2	0.0	0.0	0.0	0.0
11400.0	20.65	224.52	11157.0	1417.2	-1010.4	-993.7	0.0	0.0	0.0	0.0
11600.0	20.65	224.52	11344.1	1487.7	-1060.7	-1043.1	0.0	0.0	0.0	0.0
11800.0	20.65	224.52	11531.3	1558.2	-1111.0	-1092.5	0.0	0.0	0.0	0.0
12000.0	20.65	224.52	11718.4	1628.7	-1161.3	-1142.0	0.0	0.0	0.0	0.0
12194.0	20.65	224.52	11900.0	1697.1	-1210.0	-1190.0	0.0	0.0	0.0	0.0



BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 3651
Order No. R-3315
NOMENCLATURE

APPLICATION OF OLEN F. FEATHERSTONE
FOR THE CREATION OF A NEW POOL AND
SPECIAL POOL RULES, LEA COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 6, 1967, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 11th day of September, 1967, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Olen F. Featherstone, seeks the creation of a new oil pool for Permo-Pennsylvanian production in Lea County, New Mexico, including a provision for 80-acre spacing units.

(3) That the Olen F. Featherstone Mobil-State Well No. 1, located in Unit E of Section 32, Township 14 South, Range 35 East, NMPM, Lea County, New Mexico, has discovered a separate common source of supply which should be designated the North Morton Permo-Pennsylvanian Pool; that the vertical limits of said pool should be the Lower Wolfcamp and the Upper Pennsylvanian formations as found in the interval from 10,305 feet to 10,605 feet on the log of the aforesaid Olen F. Featherstone Mobil-State Well No. 1;

and that the horizontal limits of said pool should be the NW/4 of said Section 32, Township 14 South, Range 35 East, NMPM, Lea County, New Mexico.

(4) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the North Morton Permo-Pennsylvanian Pool.

(5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(6) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(7) That this case should be reopened at an examiner hearing in September, 1968, at which time the operators in the subject pool should be prepared to appear and show cause why the North Morton Permo-Pennsylvanian Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as an oil pool for Permo-Pennsylvanian production, is hereby created and designated the North Morton Permo-Pennsylvanian Pool, with vertical limits comprising the Lower Wolfcamp and the Upper Pennsylvanian formations as found in the interval from 10,305 feet to 10,605 feet on the log of the Olen F. Featherstone Mobil-State Well No. 1, located in Unit E of Section 32, Township 14 South, Range 35 East, NMPM, Lea County, New Mexico, and horizontal limits comprising the NW/4 of said Section 32.

(2) That temporary Special Rules and Regulations for the North Morton Permo-Pennsylvanian Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
NORTH MORTON PERMO-PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the North Morton Permo-Pennsylvanian Pool or in the Lower Wolfcamp or Upper Pennsylvanian formation within the defined vertical limits of said pool within one mile thereof, and not nearer to or within the limits of another designated Wolfcamp or Pennsylvanian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may

CASE No. 3651
Order No. R-3315

CASE No. 3651
Order No. R-3315

approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 60 Each well completed or recompleted in the North Morton Permo-Pennsylvanian Pool or in the Lower Wolfcamp or Upper Pennsylvanian formation shall be assigned an 80-acre proportional factor of 5.67 for allowable purposes and in the event there is more than one well on an 80-acre proportion unit the operator may produce the allowable assigned to the unit from the well on the unit in any proportion with the special Rules and Regulations hereinafter set forth.

RULE 61 A well assigned to a non-standard proportion unit shall be treated as a standard allowable as the acreage of a standard unit bears to 80 acres as 1 bears to 5.67. That nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

IT IS FURTHER ORDERED:

RULE 62 That the locations of all wells to be drilled or completed in the North Morton Permo-Pennsylvanian Pool or in the Lower Wolfcamp or Upper Pennsylvanian formation within the defined vertical limits of said pool within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before October 1, 1967.

RULE 63 That each well presently drilling to or completed in the North Morton Permo-Pennsylvanian Pool or in the Lower Wolfcamp or Upper Pennsylvanian formation within the defined vertical limits of said pool within one mile thereof shall receive a 40-acre allowable until a Form C-102 dedicating 80 acres to the well has been filed with the Commission.

RULE 64 That this case shall be reopened at an examiner hearing in September, 1968, at which time the operators in the subject pool may appear and show cause why the North Morton Permo-Pennsylvanian Pool should not be developed on 40-acre spacing units.

RULE 65 That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-5-

CASE No. 3651

Order No. R-3315

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/

PETROLEUM INFORMATION/DWIGHTS MIDLAND REGION REPORT

SECTION III - 05/05/97

PAGE 33

NEW MEXICO DRILLING PROGRESS LEA COUNTY CONTINUED

J P H OIL 1 HODGE J P API 30-025-33492 LOC;	27-12S-38E 550 FSL 430 FWL SEC IC 300257035896	WILDCAT; 12200, (FR 07/02/96MD) OPER ADD: BOX 565, LOVINGTON, NM, PHONE (505) 396-2837; EL: 3805 GR; LOCATION DATA: 6 MI E GLADIOLA, NM APPROX 1200 FT E/9560 (WFMP) OIL PROD IN UNNAMED FLD ; (VERTICAL)	WD
SABA ENERGY TEXAS 1 SABA STATE API 30-025-33726	7-13S-36E 2310 FSL 1308 FEL SEC IC 300257071096	WILDCAT; 14200 DEVONIAN, (FR 12/19/96MD) OPER ADD: 1603 SE 19TH ST, STE 202, EDMOND, OK, 73013 PHONE (405) 340-3600; EL: 4003 GR; LOCATION DATA: 4 MI S TATUM, NM .75 MI S/10285 (WFMP) OIL PROD IN TATUM FIELD ; (VERTICAL)	WD
CONTR: LAKOTA DRLG, RIG #2; SPUD: 12/26/96, CSG: 5 1/2 @ 13980 W/1400 SX; DRLG COMMENTS: FARO 25-100 BOPH THRU 12/64 TO 21/64 CK W/NO WTR IN 4 HR TEST PERIOD. FORM & INTERVAL NOT RPTD. RIG REL: 02/22/97; ... 14031 TD, WOPE (LDIR 05/02/97)			
RAND PAULSON OIL 1 STATE '26' API 30-025-33748	26-13S-37E 1800 FSL 990 FWL SEC IC 300257073696	WILDCAT; 12000 ATOKA, (FR 12/30/96MD) (ST APPD PMT: 12/27/96) OPER ADD: 4950 N OCONNOR BLVD, STE 270, IRVING, TX, 75062 PHONE (972) 717-9796; EL: 3859 GR; LOCATION DATA: 6 MI S GLADIOLA, NM .75 MI W/9332 (WFMP) OIL PROD IN KING FIELD ; (VERTICAL)	WD
CONTR: TMBR SHARP DRLG, RIG #23; SPUD: 01/11/97, CSG: 13 3/8 @ 400 W/450 SX, 8 5/8 @ 5000, 5 1/2 @ 11950 W/1050 SX; DST # 1 (WOLFCAMP) 9520-9572, NO DETAILS DST # 2 (WOLFCAMP) 10732-10754, NO DETAILS; (TD REACHED: 02/ 12/97), RIG REL: 02/17/97; ... 11950 TD, TSTG (LDIR 05/02/97)			
RAND PAULSON OIL 1 ESTACADO '27' STATE API 30-025-33849	27-14S-34E 1650 FSL 2125 FWL SEC IC 300257015097	WILDCAT; 12500 ATOKA, (FR 03/03/97MD) (ST APPD PMT: 02/28/97) OPER ADD: 4950 N OCONNOR BLVD, STE 270, IRVING, TX, 75062 PHONE (214) 717-9796; EL: 4103 GR; LOCATION DATA: 28 MI SE CAPROCK, NM .75 MI NE/10428 (PSLV) OIL PROD IN TRES PAPALOTES FIELD ; (VERTICAL)	WD
CONTR: TMBR SHARP DRLG, RIG #24; SPUD: 03/06/97, CSG: 13 3/8 @ 443, 5 1/2 @ 10639; DST # 1, NO DETAILS DST # 2, NO DETAILS; RIG REL: 04/05/97; PROD TEST(S): PERF , 10448-10482, W/36 SHOTS, ACID (10448-10482) W/ 750 GALS, F 600 BOPD, 24 HR, ... 10639 TD, WOPT (LDIR 05/01/97)			
RAND PAULSON OIL 2 ESTACADO '27' STATE API 30-025-33922	27-14S-34E 2040 FNL 2040 FEL SEC IC 300257025897	WILDCAT; 12500 ATOKA, (FR 04/14/97MD) (ST APPD PMT: 04/11/97) OPER ADD: 4950 N OCONNOR BLVD, STE 270, IRVING, TX, 75062 PHONE (214) 717-9796; EL: 4104 GR; LOCATION DATA: 28 MI SE CAPROCK, NM .75 MI SW/10463 (PSLV) OIL PROD IN HIGH PLAINS FLD ; (VERTICAL)	WD
CONTR: TMBR SHARP DRLG, RIG #24; SPUD: 04/08/97, CSG: 13 3/8 @ 400; ... DRLG 5900, MUD WT 9.7 (LDIR 05/01/97)			
RAND PAULSON OIL 3 ESTACADO '27' STATE API 30-025-33923	27-14S-34E 1980 FNL 1980 FWL SEC IC 300257025997	WILDCAT; 12500 ATOKA, (FR 04/14/97MD) (ST APPD PMT: 04/11/97) OPER ADD: 4950 N OCONNOR BLVD, STE 270, IRVING, TX, 75062 PHONE (214) 717-9796; EL: 4106 GR; LOCATION DATA: 28 MI SE CAPROCK, NM .75 MI NE/10428 (PSLV) OIL PROD IN TRES PAPALOTES FLD ; (VERTICAL)	WD
CONTR: DEL MAR DRLG, RIG #6; SPUD: 04/29/97, ... DRLG SURF (LDIR 05/01/97)			
RAND PAULSON OIL 1 NICHOLAS '31' FEDERAL API 30-025-33822	31-14S-35E 2090 FNL 660 FEL SEC IC 300257006197	WILDCAT; 12500, (FR 01/24/97MD) (ST APPD PMT: 02/10/97) OPER ADD: 4950 N OCONNOR BLVD, STE 270, IRVING, TX, 75062 PHONE (214) 717-9796; EL: 4042 GR; LOCATION DATA: 15 MI NW LOVINGTON, NM .25 MI NE/10450 (PVP) OIL PROD IN UNNAMED FLD ; (VERTICAL)	WD
CONTR: NORTON DRLG, RIG #17; SPUD: 03/21/97, CSG: 13 3/5 @ 450 W/450 SX, 8 5/8 @ 6214; DST # 1, NO DETAILS DST # 2, NO DETAILS DST # 3, NO DETAILS; ... DRLG 10210, MUD WT 9.2 (LDIR 05/01/97)			
BROWN H L JR 2 NORTH FEATHER STATE UNIT API 30-025-33678 CONTR: PETERSON DRLG, RIG #1; SPUD: 03/30/97, ... DRLG 8138 (LDIR 04/18/97)	9-15S-32E 1340 FSL 990 FEL SEC IC 300257085296	FEATHER NORTH; 12500 MORROW, (FR 11/19/96MD) OPER ADD: BOX 2237, MIDLAND, TX, 79702 PHONE (915) 683-5216; EL: 4301 GR; LOCATION DATA: 25 MI S CAPROCK, NM ; (VERTICAL)	D
MATADOR OPERATING 1 STATE API 30-025-23754-0001 LOC;	27-15S-33E 660 FNL 660 FEL SEC IC 300257022497	WILDCAT; 12499 MORROW, (FR 03/27/97MD) (ST APPD PMT: 03/27/97) OPER ADD: 415 W WALL, STE 1101, MIDLAND, TX, 79701 PHONE (915) 687-5955; EL: 4171 GR; LOCATION DATA: 23 MI SE CAPROCK, NM 2 MI NW/10204 (WFMP) OIL PROD IN HUME NORTH FIELD ; (VERTICAL) OWDD: OLD INFO: FORMERLY MONCRIEF W A JR 1 STATE. ELEV 4171 GR, 4183 DF. SPUD 4/18/71. 11 3/4 @ 304 W/300 SX, 8 5/8 @ 4300 W/300 SX. LOG TOPS: ABO SH 7870, WOLFCAMP 9385, CISCO 10190. OTD 10330. COMP 5/17/71. D&A;	WFD
YATES PET 2 PAPALOTES API 30-025-33276 LOC;	2-15S-34E 330 FSL 1800 FWL SEC IC 300257005896	WILDCAT; 12100 STRAWN, (FR 01/25/96MD) (ST APPD PMT: 01/24/97) OPER ADD: 105 S 4TH ST, ARTESIA, NM, 88210 PHONE (505) 748-1471; EL: 4078 GR; LOCATION DATA: 28 MI SE CAPROCK, NM 1.50 MI NW/10242 (WFMP L) OIL PROD IN MORTON FLD ; (VERTICAL)	WD
SANTA FE ENERGY RES 1 GRASSLANDS '27' API 30-025-33733 LOC;	27-15S-34E 1243 FSL 353 FEL SEC IC 300257072296	WILDCAT; 14500, (FR 12/19/96MD) OPER ADD: 550 W TEXAS, STE 1330, MIDLAND, TX, 79701 PHONE (915) 687-3551; EL: 4071 GR; LOCATION DATA: 31 MI SE CAPROCK, NM 1.50 MI NW/10568 (CSCO) OIL PROD IN UNNAMED FLD ; (VERTICAL)	WD

OPER. ORIGIN NO. 159123

PROPERTY NO. 20409

POOL CODE

EXP. DATE 2/10/97

API NO. 30-025-33822

REPLICATE
ctions on
ide) 00240

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

UNI
DEPARTMENT
BUREAU OF

APPLICATION FOR F

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER

SINGLE
ZONE ☐

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Rand Paulson Oil Company, Inc.

915/687-0323

3. ADDRESS AND TELEPHONE NO.

508 W. Wall, Suite 100

Midland, TX 79701

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

At surface

2090' FNL & 660' FEL

At proposed prod. zone

Same

Unit H

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

15 miles NW of Lovington, NM

15. DISTANCE FROM PROPOSED*

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

660'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*

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

110' dry hole

19. PROPOSED DEPTH

12,500'

20. ROTARY OR CABLE TOOLS

Rotary

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

4042' GL

22. APPROX. DATE WORK WILL START*

February 5, 1997

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" J-55	54.5#	450'	Circ. 450' EXT. CEMENT
11"	8 5/8" *	32.0#	6200'	QTY TO BE DETERMINED*
7 7/8"	5 1/2" *	17.0#	12500'	QTY TO BE DETERMINED*

Mud Program:

0' - 450': Fresh water Gel spud mud:
450' - 6,200': FW BW Oil:
6,200' - 10,200': Fresh water:
10,200' - 12,500': FW Gel FLA:
Mud up @ 9,400".

Mud Wt.

8.3- 8.9 ppg
8.5-10.2 ppg
8.4- 9.0 ppg
9.0- 9.5 ppg

Vis.

32 - 36
28 - 36
28 - 30
28 - 30

W/L Control

No W/L control.
No W/L control.
No W/L control.
W/L cont. 10cc.

BOP Program:

A 3000 psi wp 12" Shaffer LWS BOP and Annular will be installed on the 13 3/8" casing, to be used to a depth of 6,200'. A 5000 psi wp 11" Schaffer Type E BOP, will be installed on the 8 5/8" casing. Casing and BOP will be tested before drilling out and will be tested daily.

* NOTE: See Exhibit "F" for details on the casing and cementing program.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

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

George L. Smith

TITLE

Agent for:
Rand Paulson Oil Co.

DATE

Jan. 16, 1997

(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

(ORIG. SGD.) JAMES G. PETTENGILL

TITLE

Acting ADM, MINERALS

DATE

2-6-97

*See Instructions On Reverse Side

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2065, SANTA FE, N.M. 87504-2065

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 3D-025-33822	Pool Code ✓	Pool Name Undesignated Wildcat Atoka
Property Code 2D409	Property Name NICHOLAS 31 FEDERAL	Well Number 1
OGRID No. 159123	Operator Name RAND PAULSON OIL COMPANY, INC.	Elevation 4042

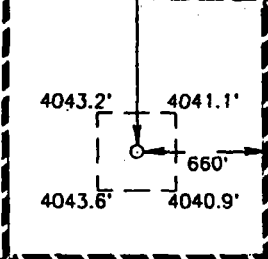
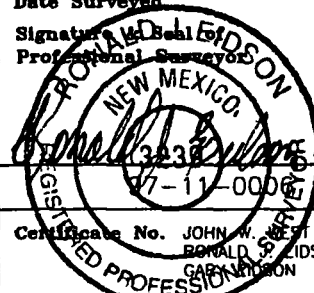
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	31	14 S	35 E		2090	NORTH	660	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code		Order No.					

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

<p>LOT 1</p>	<p>Rand Paulson Oil Company, Inc.</p>	<p>OPERATOR CERTIFICATION</p> <p><i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p><u>George R. Smith</u> Signature</p>
<p>40.48 ACRES LOT 2</p>	<p>NM-96249</p> 	<p>George R. Smith, agent for: Printed Name</p> <p>Rand Paulson Oil Company, Inc. Title</p> <p>January 17, 1997 Date</p>
<p>40.53 ACRES LOT 3</p>		<p>SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>JAN. 3, 1997</p>
<p>40.57 ACRES LOT 4</p>		<p>Date Surveyed: _____ DMCC</p> <p>Signature: _____ Professional Surveyor</p>  <p>Certificate No. JOHN W. BEIT 676 RONALD S. EIDSON 3239 GARY N. EIDSON 12641</p>

APPLICATION FOR DRILLING
RAND PAULSON OIL COMPANY, INC
Nicholas 31 Federal, Well No., 1
2090' FNL & 660' FEL, Sec. 31-T141S-R351E
Lea County, New Mexico
Lease No.: NM-96249
(Exploratory Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Rand Paulson Oil Company, Inc. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

Anhy	1860'	ME WC A	10390'
Yates	2977'	EE WC	10580'
San Andres	4430'	Cisco Por. Dol.	10730'
Abo	8072'	Canyon	10870'
WC/B. Leonard	9725'	Canyon Por. Dol	11120'
XX	9940'	Strawn	11875'
LE WC	10140'	Atoka	12015'
ME WC B	10270'	T.D.	12500'

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Random fresh water sands from surface to - 200'+/-.

Oil: Possible in the EE WC below 10580', Cisco Dolo. below 10730', Canyon Dolo. below 11120', Strawn below 11875'.

Gas: None expected.

4. Proposed Casing Program: See Form 3160-3.
5. Proposed Control Equipment: See Form 3160-3 and Exhibit "E".
6. Mud Program: See Form 3160-3.
7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock.
8. Testing, Logging, and Coring Program:

Drill Stem Tests: Three possible to be determined by geologist.

Logging: Intermediate casing to surface: GR/N.

T.D. to intermediate casing: DI-SFL/GR/CAL/SP, LS/Acoustic/GR/CAL,

T.D. to intermediate casing: Micro/Mini log/GR/CAL, Z/Dens./Neutron/GR/CAL

Coring: None planned.

9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated BHP = 5000 psi (evac.) with temperature = 185°.
10. H2 S: None expected.
11. Anticipated starting date: February 5, 1997
Anticipated completion of drilling operations: Approximately 60 days.

EXHIBIT "F"

RAND PAULSON OIL COMPANY, INC.
NICHOLAS 31 FEDERAL NO. 1
LEA COUNTY, NEW MEXICO

DRILLING PROGNOSIS

ELEVATION: GL 4042'

LOCATION: 2090' FNL; 660' FEL; Section 31; T-14-S; R-35-E.

DIRECTIONS: From Lovington, NMX, go North on CR 103 8 miles. Turn West on CR 108 for 6 miles. Turn South on Gravel road 1.5 miles. Turn East through CG. Follow road to Location. Norton Drilling rig.

CASING:

Surface: 450' of 13 3/8" 54.5 lbs. J-55 STC Csg. TP Shoe, Baffle Plate, Stop Ring and 6 Centralizers.

Intermediate: 4000' 8 5/8" 32 lbs. K-55 STC Csg. Stage Cementing Collar @ 4000'.
2200' 8 5/8" 32 lbs. HCK-55 or S-80 STC Csg. Guide Shoe, Float Collar, Stop Ring, 6 Centralizers.

Production: 1,100' 5 1/2" 17 lbs S-95 LTC R-3 Csg.
10,700' 5 1/2" 17 lbs N-80 LTC R-3 Csg.
Stage Cementing Collar @ 9000'.
700' 5 1/2" 17 lbs S-95 LTC R-3 Csg.

CEMENTING:

SURFACE: 450 sx Class C + 2% CaCl₂ mixed @ 14.8 #/gal;
1.32 ft³/sk; 6.32 gals wtr/sk..

Intermediate: Stage 1: Class C + 3% Sodium Metasilicate + 3# salt/sk + 1/4 lb/sk
Celloflakes mixed @ 11.5 lbs/sk; 2.77 ft³/sk.
200 sx Class C Neat mixed @ 14.8 lbs/gal; 1.32 ft³/sk.
Stage Cementing Collar @ ± 4000'.

Stage 2: Same as Stage 1.

*Volume to be determined from Fluid Caliper. Circulate to Surface.

Production: Stage 1: Class H:Pozzalan 50:50 w/additives. 14.6 #/gal; 1.27 ft³/sk.
Stage Cementing Collar @ 9000'
Stage 2: Class H:Pozzalan 65:35 w/additives. 12.0 #/gal; 2.27 ft³/sk.
Class H Neat

*Volumes to be determined from Caliper Log. TOC 6000'.

BITS:

Contractor's choice - Norton Drlg Co. 17 1/2"; 11"; 7 7/8".

RIG 15

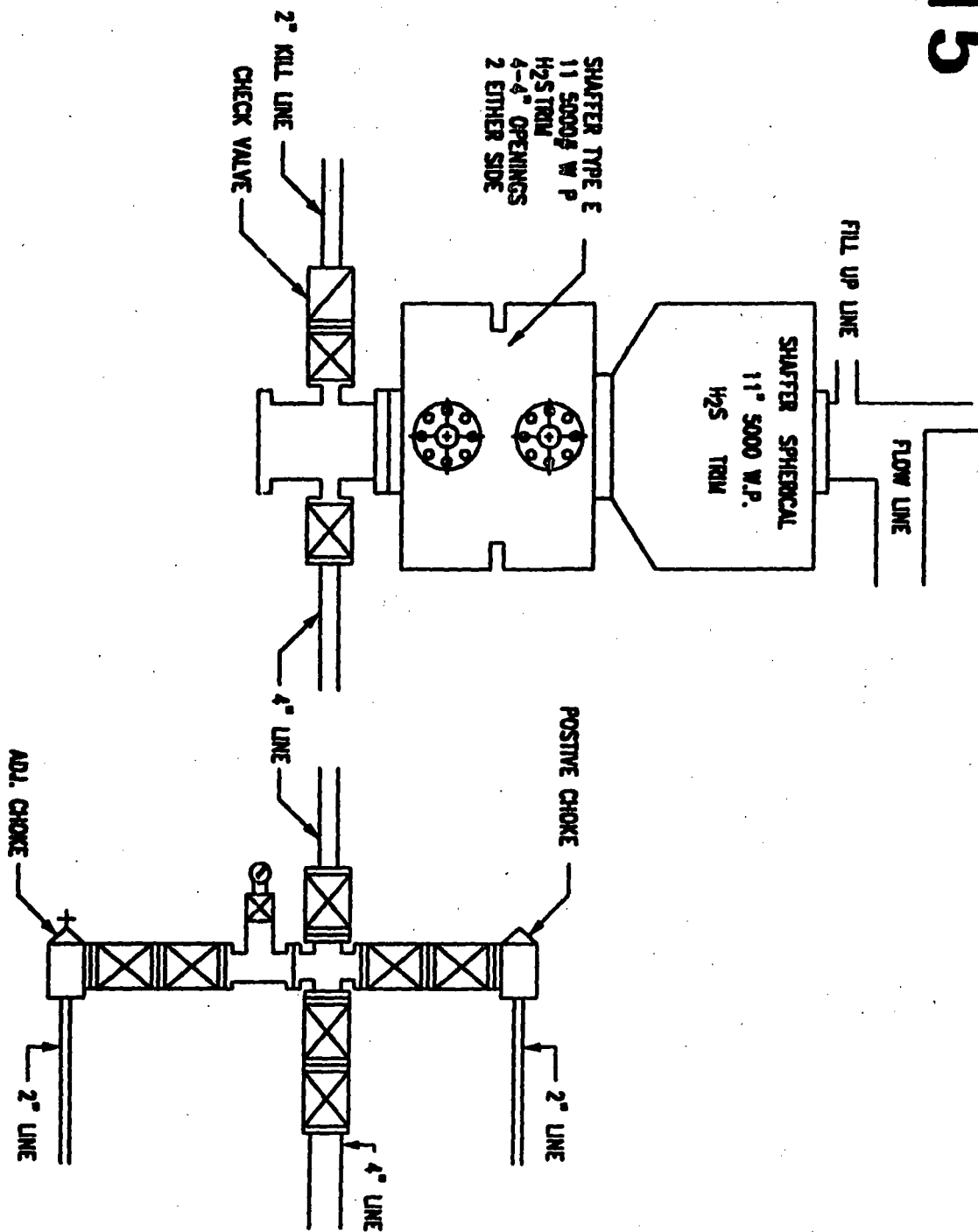


EXHIBIT "E"
 RAND PAULSON OIL COMPANY, INC
 Nicholas Federal, Well No. 1
 BOP Specifications

MULTI POINT SURFACE USE AND OPERATIONS PLAN

RAND PAULSON OIL COMPANY, INC.

Nicholas Federal, Well No. 1

2090' FNL & 660' FEL, Sec. 31-T14S-R35E

Lea County, New Mexico

Lease No.: NM-96249

(Exploratory Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface environmental effects associated with the operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a New Mexico road map showing the location of the proposed well as staked, in relation to existing roads and highways. The well site location is approximately 15.5 road miles northwest of Lovington, New Mexico. Traveling north from Lovington, there will be approximately 14 miles of paved Lea County roads and 1.5 miles of county gravel roads.
- B. Directions: Travel north from the corner of Gum and 3rd St. in Lovington, NM on Lea County road No. C103 for 8 miles to county road C108. Turn left (west) on C108 for 6 miles, where the paved road turns north. Turn south on gravel road C104 for 1.5 miles. At this point there is a north/south fence on the east side of the road and another fence running east/west down the center of this section. The proposed access road starts at this corner of the fence and follows the north side of the fence east for 4,500 feet to the southwest corner of the proposed location.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be approximately 4,500 feet in length and 12 feet wide (24' Max.), which is color coded red on Exhibit "B".
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche. The surface will be properly drained.
- C. Turnouts: There will be three or four turnouts for passing, increasing the road width to 20 feet.
- D. Culverts: None required.
- E. Cuts and Fills: None required..
- F. Gates, Cattle guards: There will be two cattle guards required.
- G. Off Lease R/W: None required.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a two mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. There are no production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery will be installed on the drilling pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access road.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing and upgrading the existing access road and well site pad will be obtained from a pit on the proposed location. No surface materials will be disturbed except those necessary for actual grading and surfacing of the proposed drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pit.
- B. Drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary land fill within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, waste pits, and major rig components. The pad and pit area has been staked and flagged 400' X 400'.
- B. Mat Size: Maximum size: 275' X 195', plus a 130' X 120' pit area.
- C. Cut & Fills. None required.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced and screened until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the surface land owner will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as the pits are dry enough to work.

11. OTHER INFORMATION:

- A. Topography: The proposed well site and access road are located in the level Eastern New Mexico high plains northwest of Lovington, NM. The overall slope in the area is less than .33% to the east/southeast. The proposed location has an elevation of 4042' G.L.
- B. Soil: The topsoil at the well site is a light brown colored gravelly loam of the Kimbrough-Lea complex soil series. The surface soil has caliche scatter and is underlain with caliche.
- C. Flora and Fauna: The vegetation cover is a fair to good grass cover of three-awn, grama, bluestem, and dropseed along with plants of yucca, cacti, and miscellaneous weeds and wildflowers. The wildlife consists of antelope, rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None in the area.
- E. Residences and Other Structures: There is a ranch house 1.5 miles to the northwest and an old tank battery to the southwest.
- F. Land Use: Cattle grazing.

11. OTHER INFORMATION; cont.....

- G. Surface Ownership: The proposed well site and access road is on Fee surface owned by John R. Anderson, P.O. Box 136, Gail, TX 79738, phone No. (806) 0 756-4374. An agreement has been negotiated to compensate the surface owner for damages.
- H. There is no evidence of any archaeological, historical or cultural sites in the immediate area of the well site and access road. An archaeological survey will be conducted by Archaeological Survey Consultants, P.O. Box D, Roswell, NM 88202 and their report will be submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:


- A. The field representative for assuring compliance with the approved surface use and operations plan is as follows:

John Mulloy
J. W. Mulloy Associates, Inc.
508 W. Wall, Suite 100
Midland, Texas 79701
Office Phone: (915) 687-0323

13. CERTIFICATION:

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Rand Paulson Oil Company, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

January 16, 1997


George R. Smith
Agent for: Rand Paulson Oil Company, Inc.

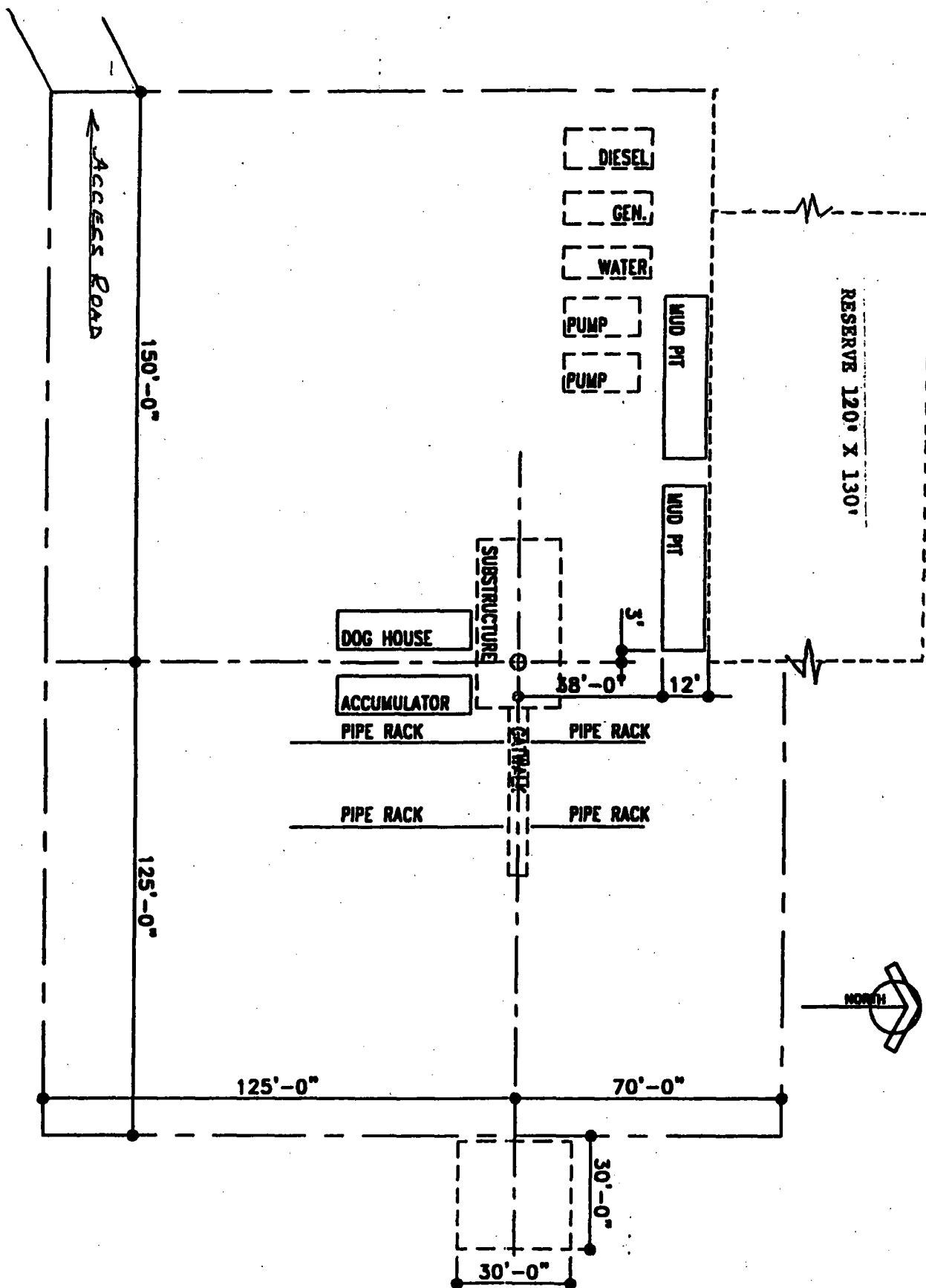


EXHIBIT "D"
 RAND PAULSON OIL COMPANY, INC.
 Nicholas Federal, Well No. 1
 Pad & Pit Layout

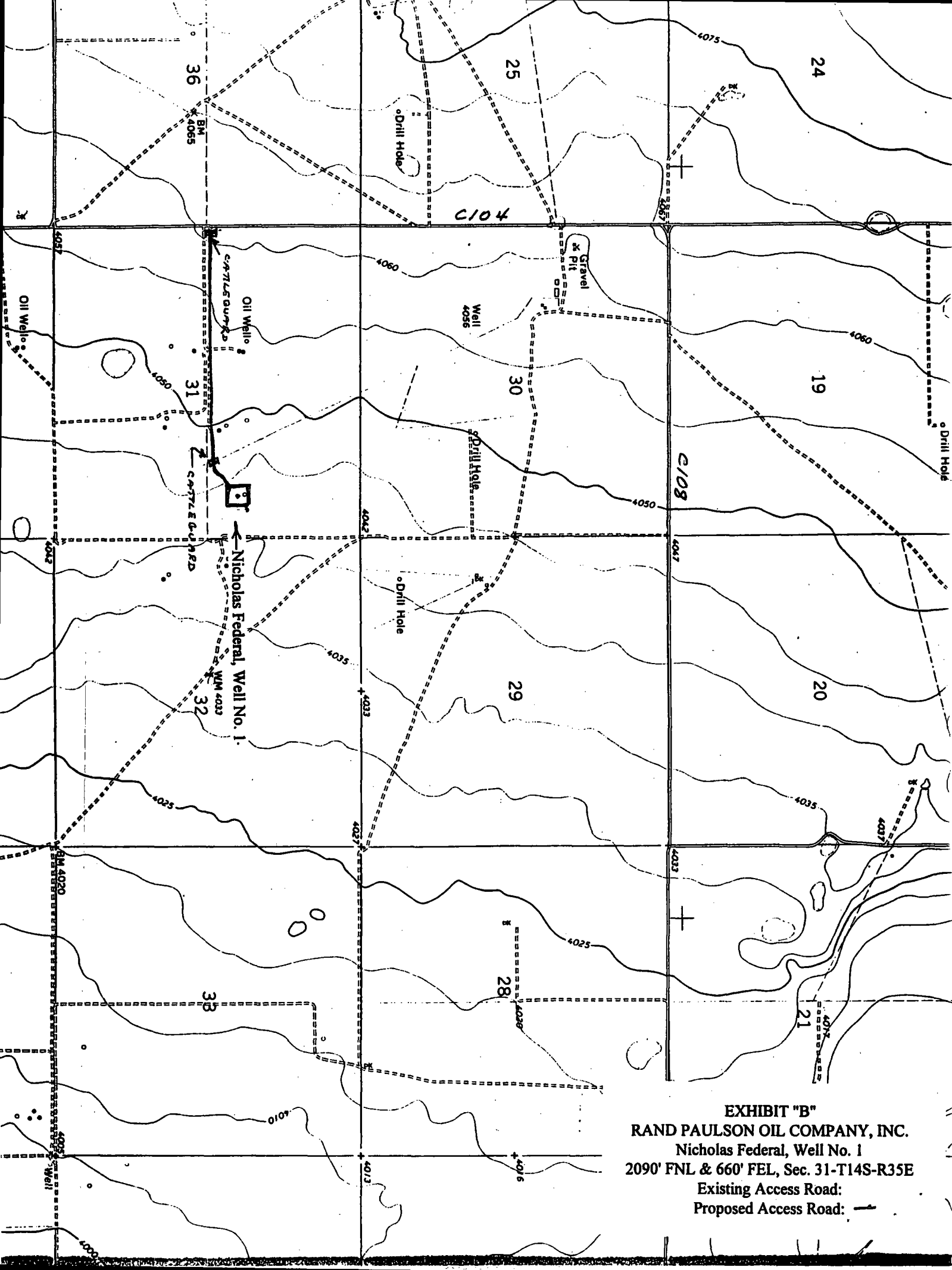


EXHIBIT "B"
RAND PAULSON OIL COMPANY, INC.
Nicholas Federal, Well No. 1
2090' FNL & 660' FEL, Sec. 31-T14S-R35E
Existing Access Road:
Proposed Access Road: —

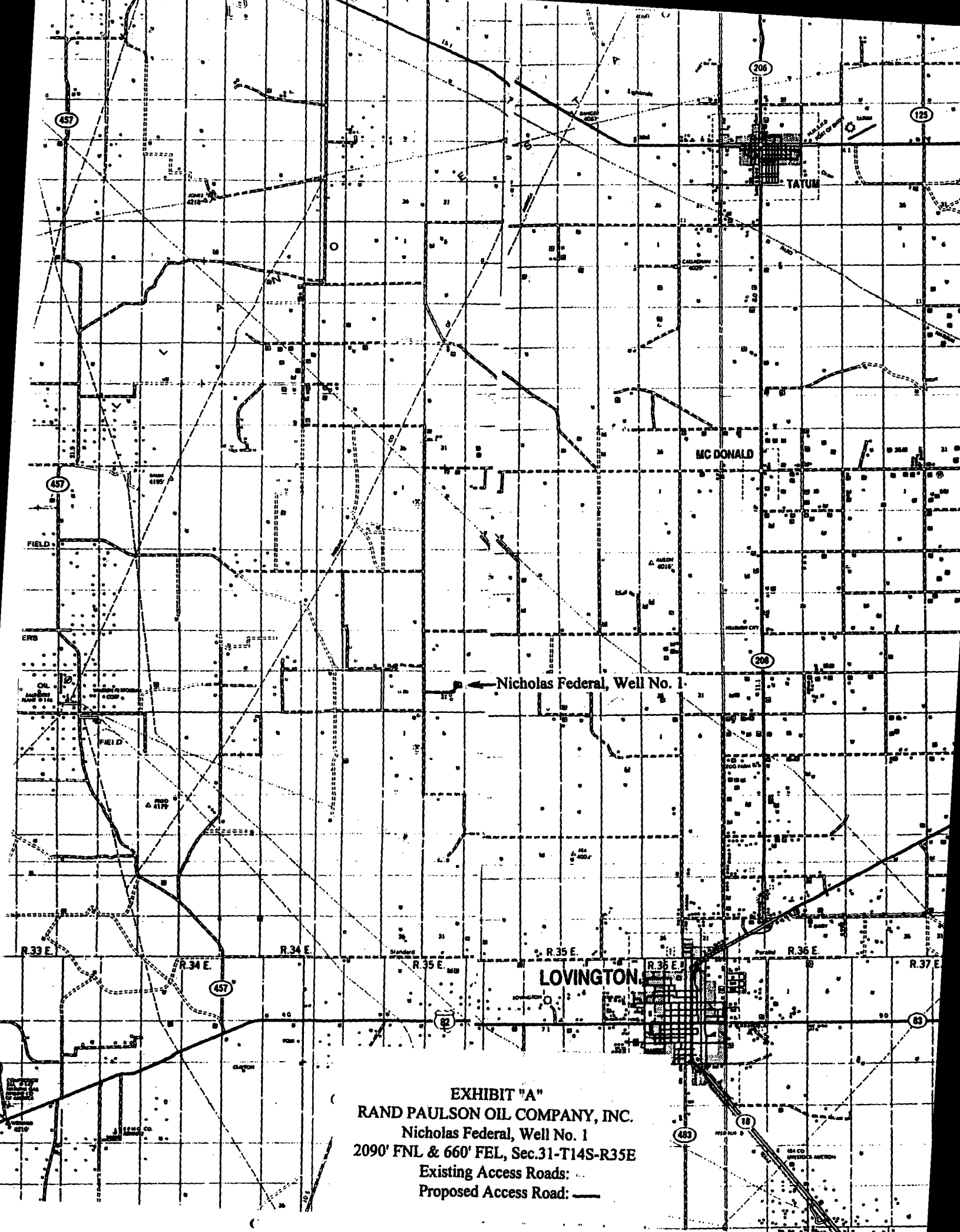
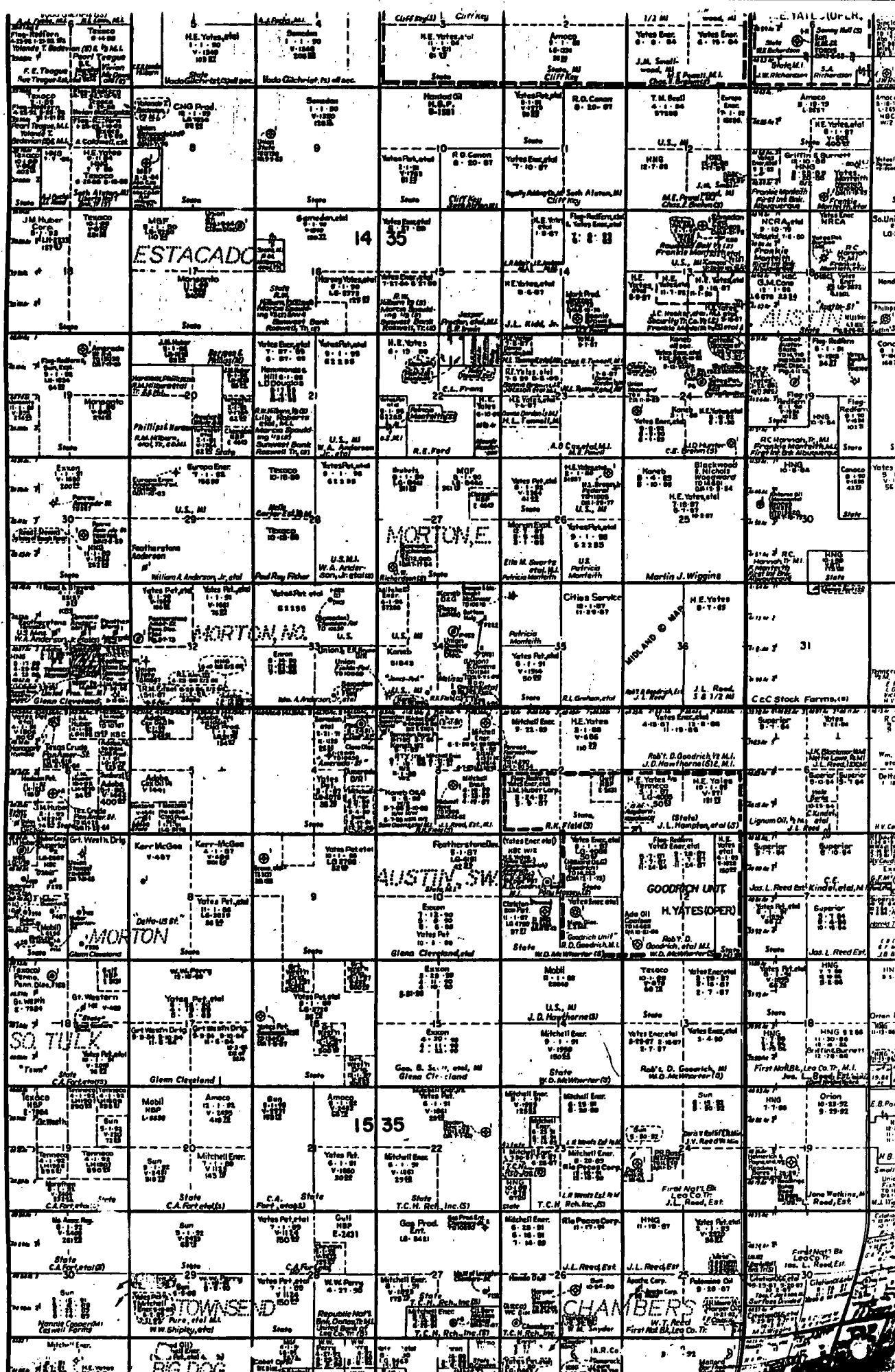


EXHIBIT "A"
RAND PAULSON OIL COMPANY, INC.
Nicholas Federal, Well No. 1
2090' FNL & 660' FEL, Sec. 31-T14S-R35E
Existing Access Roads: —
Proposed Access Road: —

1300'



00157

PROCEDURE DIVISION.

00159

OPEN INPUT EMPLOYEE-MASTER-FILE

00160

OUTPUT REPORT-OUT-FILE.

00161

MOVE CURRENT-DATE TO REPORT-DATE.

00162

READ EMPLOYEE-MASTER-FILE

00163

AT END

00164

MOVE 'YES' TO END-OF-FILE-SWITCH

00165

MOVE 000 TO GRAND-EMPLOYEES

00166

WRITE REPORT-LINE FROM GRAND-TOTAL-LINE AFTER 2.

00167

PERFORM PROCESS-JOB-CLASS

00168

UNTIL END-OF-FILE-SWITCH = 'YES'.

00170

PROCESS-TOTAL.

00171

MOVE WS-GRAND-CNTR TO GRAND-EMPLOYEES

00172

MOVE WS-GRAND-GROSS TO GRAND-GROSS-PAY

00173

WRITE REPORT-LINE FROM GRAND-TOTAL-LINE AFTER 2.

00175

CLOSE EMPLOYEE-MASTER-FILE

00176

REPORT-OUT-FILE.

00177

STOP RUN.

00179

PROCESS-JOB-CLASS.

00180

MOVE EMP-JOB-CLASS TO PREV-JOB-CLASS.

00181

PERFORM PROCESS-EMPLOYEE-DETAIL

00182

UNTIL END-OF-FILE-SWITCH = 'YES'

00183

OR EMP-JOB-CLASS IS GREATER THAN PREV-JOB-CLASS.

00185

MOVE PREV-JOB-CLASS TO SUB-JOB-CLASS.

00186

MOVE EMP-CNTR TO SUB-EMPLOYEES.

00187

MOVE WS-GROSS-PAY TO SUB-GROSS-PAY.

00188

WRITE REPORT-LINE FROM SUB-TOTAL-LINE AFTER 2.

00189

ADD EMP-CNTR TO WS-GRAND-CNTR.

00190

ADD WS-GROSS-PAY TO WS-GRAND-GROSS.

00191

ADD 2 TO LINE-CNTR.

00192

MOVE ZERO TO EMP-CNTR.

00193

MOVE ZERO TO WS-GROSS-PAY.

00195

PROCESS-EMPLOYEE-DETAIL.

00196

IF LINE-CNTR IS GREATER THAN 54

00197

PERFORM WRITE-HEADINGS

00198

ELSE

00199

NEXT SENTENCE.

00201

ADD 1 TO EMP-CNTR.

00202

ADD EMP-YTD-GROSS TO WS-GROSS-PAY.

00204

MOVE EMP-NUMBER TO DTL-EMP-NO.

00205

MOVE EMP-LAST-NAME TO DTL-LAST-NAME.

00206

MOVE EMP-FIRST-NAME TO DTL-FIRST-NAME.

00207

MOVE EMP-MID-INITIAL TO DTL-MID-INITIAL.

00208

MOVE EMP-SS-NO TO DTL-SSNO.

00209

MOVE EMP-JOB-CLASS TO DTL-JOB-CLASS.

00210

MOVE EMP-YTD-GROSS TO DTL-YTD-GROSS.