District I PO Box 1980, Hobbs, NM 88241-1980 District II PO Drawer DD, Artesia, NM 88211-0719

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

District IV PO Box 2088, Santa Fe, NM 87504-2088

# State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

Form C-101 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 6 Copies Fee Lease - 5 Copies

### AMENDED REPORT APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE Operator Name and Address. 1 OGRID Number 2678 Bonneville Fuels Corporation 1660 Lincoln St., Suite 1800 3 API Number Denver, Colorado 80264 30-025-331 <sup>4</sup> Property Code Well No. 5 Property Name 215/ ⊂ 2158 LY Norris #4 <sup>7</sup> Surface Location Township Lot Idn Feet from the North/South line UL or lot no. Feet from the East/West line Section Range County East М 13 17S 37E 710' South 330' Lea <sup>8</sup> Proposed Bottom Hole Location If Different From Surface UL or lot no. Lot Idn Feet from the North/South line Feet from the Section Township Range East/West line County 1 Proposed Pool 2 Proposed Pool 1 South Humble City: Strawn Work Type Code 12 Well Type Code 13 Cable/Rotary 14 Lease Type Code 15 Ground Level Elevation R Ρ 3722' " Multiple 11 Formation " Proposed Depth 1 Contractor 28 Spud Date No 11,840' Atoka Shale 8-1-95 <sup>21</sup> Proposed Casing and Cement Program Casing weight/foot Setting Depth Sacks of Cement Estimated TOC Hole Size Casing Size 17-1/2" 13-3/8" 54.5 450! 475 sx Surface <u>11"</u> 8-5/8" 32.0 4,675' 1,185 sx. Surface 7-7/8" 5-1/2" 17.0 11,840' 1st: 550 sx 8,840' 2nd: 5**3**0 sx 4,375' Stage Tool @ 8 Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary. Drill 17-1/2" hole to 450'. Set & cement 13-3/8" casing (w/475 sx. cmt.) to surface. Install BOPE. Pressure test to 1000 PSIG. Drill 11" hole to 4,675'. Set & cement 8-5/8" intermediate casing (w/1,185 sx. cmt.) to isolate upper Permian salts and anhydrites & to provide well control prior to drilling deep oil and gas bearing formations. Test BOPE and casing to 2500 PSIG. Drill 7-7/8" hole to 11,840' to evaluate Strawn Fm. Run DST in Strawn Fm. and log 7-7/8" hole. Run 5-1/2" casing & cement to 4,375' (w/ 1,080 sx. cmt. in 2 stages w/Tool @ 8,840') if warranted. Otherwise, P&A well as directed by State of New Mexico. including ROPE/specification is attached for your information 35 I hereby certify that the information given above is tpse and complete to the best OIL CONSERVATION DIVISION of my knowledge and belief. ORIGINAL SIGNED BY JERRY SEXTON Signature: Approved by: DISTRICT I SUPERVISOR Title: Printed name: Robert A. Schwering Expiration Date: Approval Date NOV 28 1995 Title: Senior Engineer Date: Conditions of Approval: Phone: May 25, 1995 (303) 863-1555 Attached Permit expires 6 Months From

Date Unless Drilling Underway,

Commence of the Control of the Control



## EIGHT POINT DRILLING PLAN

Attached to Form C-101:

Operator: Bonneville Fuels Corporation

Red Beds:

Tubb Fm.

Norris #4

710' FSL & 330' FEL

Section 13, T.17S., R.37E. N.M.P.M. Lea County, New Mexico

### ESTIMATED TOPS: IMPORTANT GEOLOGIC MARKERS: 1.

Permian:

1800' Anhydrites & Red Beds: Anhydrites, Salts & Shales: 2300' Anhydrites & Shales: 3700'
First Hard Dolomite: 4600' to 4690' Seven Rivers Fm.: 4800′ 5125' Oueen Fm.: Grayburg Fm. 5320′ San Andres Fm. 5605' Glorieta Fm. 7080′ Yeso Fm. 7270'

Surface

8160′

Lower Clearfork Fm. 8460′ Bone Springs Fm. 9495′ 9825′ Abo Fm. Wolfcamp Group 9955′ Wolfcamp Detrital 11005'

Pennsylvanian:

11320' Canyon Fm. Strawn Fm. 11415' Lower Strawn 11665' Atoka Fm. 11740'

### ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS: 2.

Fresh Water: Occ. Surface Sands: Surface to 400'.

11415'. Strawn Fm.: Oil and Gas Targets: Lower Strawn:

11665'.

Tubb Fm.: 8160′. Possible Gas and Oil:

Lower Clearfork Fm.: 8460'.

Wolfcamp Fm.: 9955′.

PROJECTED TOTAL DEPTH: 11,840'.



# 3. MINIMUM SPECS FOR PRESSURE CONTROL:

- a. A diagram of the Blowout Preventer Stack and Wellhead Equipment is presented in Exhibit #1. The wellhead equipment for the intermediate hole (11" @ 4675') is altered only by the replacement of the 13-5/8" 3000 psi WP x 11" 5000 psi WP crossover spool with the 13-5/8" 3000 psi WP x 11" 5000 psi WP casing spool during the drilling of the 7-7/8" production hole. A diagram of the Choke Manifold is presented in Exhibit #2. All BOP and Choke Manifold equipment will be rated to 5000 psi WP(min).
- b. Surface Casing Wellhead Equipment will consist of:
  - i. A 13-5/8" slip-on weld-on 3000 psi WP(min) braiden head w/ 2: 2" SE outlets with 2: 2" SE XXHVY Nipples and 2: 2" SE FO 3000 psi WP(min) ball valves. This braiden head will be welded on & nippled up after the 450' 13-3/8" Surface Casing is set and cemented.
  - ii. A 13-5/8" 3000 psi WP(min) x 11" 5000 psi WP(min) cross-over spool will be installed upon the braiden head. This spool will be removed when the 8-5/8" Protective Casing has been set and cemented.
  - iii. All wellhead and BOP equipment and the 13-3/8" surface casing will be pressure tested to 1000 psi with the rig pumps prior to drilling out.
- c. Protective Casing Wellhead Equipment will consist of:
  - i. A 13-5/8" slip-on weld-on 3000 psi WP(min) braiden head w/ 2:
     2" SE outlets with 2: 2" SE XXHVY Nipples and 2: 2" SE FO 3000 psi WP(min) ball valves.
  - ii. A 13-5/8" 3000 psi WP x 11" 5000 psi WP casing spool w/ 2: 2" FO FE outlets w/ 2: 2" FO FE 5000 psi WP gate valves. This casing spool will be nippled up after the 4675' 8-5/8" protective casing is set and cemented. The secondary seal will be tested to 1500 psi.
  - iii. All wellhead and BOP equipment and the 8-5/8" protective casing will be pressure tested to 2500 psi prior to drilling out.



# 3. MINIMUM SPECS FOR PRESSURE CONTROL (CONTINUED):

- d. The BOP Equipment, nippled up on the 13-5/8" 3000 psi x 11" 5000 psi cross-over spool for the 11" intermediate hole, and the 13-5/8" 3000 psi x 11" 5000 psi casing spools for the 7-7/8" production hole, will be as follows:
  - i. An 11" Nom. 5000 psi WP(min) mud cross with a 2" 5000 psi WP(min) FO FE kill-side inlet and a 4" 5000 psi WP(min) FO FE choke-side outlet.
  - ii. An 11" Nom. 5000 psi WP(min) double gate (or dual equivalent single gate) hydraulic ram-type preventer with Pipe Rams over Blind Rams. Pipe rams are anticipated to be 4-1/2".
  - - A choke manifold consisting of a 4" (min nom) x 5,000 psi iv. WP(min) FE choke/blooey line between the 2: 4" 5000 psi WP(min) FO FE master gate valves at the wellhead and the choke manifold 2 x 4" and 2 x 2" 5000 psi WP(min) cross with a 4" 5000 psi WP(min) FO FE ball/gate valve downstream of the cross. Between the downstream 4" ball/gate valve and the manifold cross will be a 4" x 4" x 2" 5000 psi WP(min) FO FE tee with a 2" 5000 psi WP(min) FO FE ball/qate valve with a 2" 5000 psi WP(min) Gauge Assembly for monitoring pressure at the choke manifold. The choke manifold will have 2: 2" 5000 psi FO FE ball/gate valves between the manifold cross and the 2: 2" FO FE 5000 psi(min) adjustable chokes (a total of 4: 2" 5000 psi ball/gate valves each wing). Provision may be made to tie in DST surface lines to the choke manifold thru an optional 2" 5000 psi WP(min) FO FE tee above the 2" 5000 psi WP(min) ball/gate valve downstream of the choke manifold cross. blooey line downstream of the choke manifold will be staked down and targeted in the reserve pit. The 2: 2" lines downstream of the chokes will be appropriately fixed or staked down to return mud to the pits, oil to test tanks, gas/oil cut mud to a separator or test tank, and gas to a flare pit.
    - v. A 5000 psi WP(min) FO safety valve and a 5000 psi WP(min) dart valve, with drill pipe threads and subs to meet other drill string threads, will be kept on the drill floor after the 13-3/8" surface casing is set. A 5000 psi(min) WP Upper kelly valve and a 5000 psi WP(min) Lower kelly valve will be kept on the kelly throughout drilling operations. All valves, and the wrenches to operate these valves, will be maintained on the floor in good order throughout drilling operations.

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# 3. MINIMUM SPECS FOR PRESSURE CONTROL (CONTINUED):

- d. The BOP Equipment (Continued):
  - vi. An accumulator with sufficient capacity to operate the BOPE against a 3000 psi well pressure(min) will be used to operate the BOP system. It shall contain double the fluid capacity calculated to open and close the pipe rams, blind rams, and annular preventer 1 time each, and then to close the pipe rams and annular preventer 1 additional time(min) and retain accumulator pressure at 200 psig over the precharge pressure. The accumulator working pressure shall be 1,500 psi(minimum) with a pre-charge pressure between 700-800 psi(minimum). A Nitrogen bottle system shall provide independent (reserve) power to operate the system in the event rig motors must be shut down.
- e. The testing procedures and frequency are as follows:
  - i. For the 13-3/8" surface casing nipple-up and prior to drilling the 11" intermediate hole:

    ALL of the pressure side BOP Equipment specified in Part d. above will be nippled-up on the surface casing and each component will be hydraulically tested for ten(10) minutes(min) to 1000 psi and five(5) minutes(min) to 300 psi prior to drilling out cement. Pipe rams will be operationally checked each 24 hour period, and the blind rams operationally checked each time pipe is pulled from the hole. These pressure tests and function tests will be noted and described on the daily drilling report. After the float collar is drilled out of the surface casing (prior to drilling out the shoe) the surface casing will be pressure tested to 1,000 psi for thirty(30) minutes(min).
- For the 8-5/8" intermediate casing nipple-up and prior to ii. drilling the 7-7/8" production hole: ALL of the pressure side BOP Equipment specified in Part d. above will be nippled-up on the casing spool and each component will be hydraulically tested for ten(10) minutes(min) to 2500 psi and five(5) minutes(min) to 250 psi prior to drilling out cement. The Pipe rams will be operationally checked each 24 hour period, and the blind rams operationally checked each time pipe is pulled from the These pressure tests and function tests will be noted and described on the daily drilling report. After the float collar is drilled out of the intermediate casing, and prior to drilling out the shoe, the intermediate casing will be pressure tested to 2,500 psi for thirty(30) minutes(min). The surface BOP equipment will be pressure tested every 30 operating days after the pressure test at protective casing nipple-up.

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# 3. MINIMUM SPECS FOR PRESSURE CONTROL (CONTINUED):

- f. Tripping procedures for well control:
  - For the 11" intermediate hole: A mud weight of 9.5 PPG is anticipated at a depth of 2300' and a mud weight of 10.4 PPG is anticipated at a depth of 4675' (Total Depth for this interval). The well will be drilled by a triple-derrick rig (92' avg. length per stand). The well will be monitored each 5 stands to insure that the BHA is not swabbing the well in. The well will be filled after each 20 stands of drill pipe, 3 stands of 6-1/2" drill collars, and as each stand of large outside diameter drill collars (7" O.D. or larger) are pulled from the hole. Pits will be monitored in order to insure that the well is taking fluid on trips. In the event that the bit is plugged on a trip the well will be filled after each 7 stands of drill pipe are pulled from the well and as each stand of drill collars are pulled from the well. Swabbing will be checked each 3 stands.
  - For the 7-7/8" production hole: ii. The anticipated maximum bottom-hole formation pressure is 3690 psig at 9,955' (Wolfcamp) and 3670 psig at 11,415' (Strawn) . The anticipated mud weight in this interval is 8.4 to 9.5 PPG. This will provide a minimum hydrostatic pressure of 4350 psig (660 psig overbalance) at the Wolfcamp and 4990 psig (1320 psig overbalance) at the Strawn. well will be drilled by a triple-derrick rig (92' avg. length per stand). The well will be monitored each 5 stands to insure that the BHA is not swabbing the well in. The well will be filled after each 20 stands of drill pipe and as each stand of drill collars are pulled from the hole. Pits will be monitored in order to insure that the well is taking fluid on the trip. In the event that the bit is plugged on a trip the well will be filled after each 5 stands of drill pipe are pulled from the well and as each stand of drill collars are pulled from the well. Swabbing will be checked each 3 stands.
- g. Procedures for running production casing:

  Prior to running production casing the hole will be filled. The blind rams will be closed and the well will be monitored for flow while a set 5.5" casing rams will be installed in the BOP to replace the pipe rams. Casing will then be run and cemented. The BOPE will remain nippled up UNTIL the well is cemented.



# 4. CASING AND CEMENTING PROGRAM:

- a. The Proposed Casing Program:
  - i. Surface Casing: 13-3/8" O.D. 54.5#/ft. J-55 8rd. ST&C: Surface to 450'.
  - ii. Intermediate Casing: Seat casing in first hard Dolomite. 8-5/8" O.D. 32#/ft. HCK-55 8rd. LT&C: Surface to 40'. 8-5/8" O.D. 32#/ft. K-55 8rd. LT&C: 40' to 3100'. 8-5/8" O.D. 32#/ft. HCK-55 8rd. LT&C: 3100' to 4675'.
- iii. Production Casing:

5-1/2" O.D. 17#/ft. L-80 8rd. LT&C: Surface to 3040'. 5-1/2" O.D. 17#/ft. K-55 8rd. LT&C: 3040' to 7340'. 5-1/2" O.D. 17#/ft. N-80 8rd. LT&C: 7340' to 11840'.

- b. The Proposed Cementing Program:
  - i. Surface Casing: Single Stage:
     Est. 75 F. @ 9.5 PPG mud @ 450'.
     Circ. Cement to Surface:
     100% excess over calculated volume.
     Top job required if cement does not circulate.
     475 sx. Class 'C' w/ 2% CaCl2 + 0.25 #/sx. cellophane:
     1.33 cu.ft./sx. @ 14.8 PPG.
  - ii. Intermediate Casing: Single Stage:

Est. 115 F. @ 10.4 PPG mud @ 4675'.

Plan Circ. Cement to Surface:

Temp. Survey & Possible Top Job If Cement Does NOT Reach
 Surface Casing @ 450'.

Lead Slurry: Est. Surface to 4375'.

160 % excess over calculated volume: Est. @
1,020 sx. Lite (65% Class 'C' + 35% Pozzalan + 6% Gel)
w/ 3% Sodium Meta-Silicate + 15 #/sx. NaCl +
0.25 #/sx. cellophane + Additives:

2.76 cu.ft./sx. @ 11.8 PPG.

Tail Slurry: Est. 4375' to 4675'.

160 % excess over calculated volume: Est. @

165 sx. Class 'C' w/ 2% CaCl2 + 0.25 #/sx. cellophane + Additives:

1.33 cu.ft./sx. @ 14.8 PPG.



# 4. CASING AND CEMENTING PROGRAM (CONTINUED):

The Proposed Cementing Program (Continued): Production Casing: Two Stage: Stage Tool @ 8840': iii. ALL VOLUMES TO BE BASED ON CALIPER LOG VOLUMES. First Stage: Est. 180 F. @ 9.2 PPG mud @ 11840'. Plan Circ. Cement to 8840': Lead Slurry: Est. 9240' to 8840'. 100 % excess over calculated volume: Est. @ 60 sx. Lite (65% Class 'H' + 35% Pozzalan + 6% Gel) w/ 12 #/sx. NaCl + 3 #/sx. KCl + Additives. 2.30 cu.ft./sx. @ 11.4 PPG. Tail Slurry: Est. 11840' to 9240': 40 % excess over calculated volume: Est. @ 490 sx. 50% Class 'H' + 50% Pozzalan + 2% Gel w/3 #/sx. KCl + Additives.1.30 cu.ft./sx. @ 14.2 PPG. Second Stage: Est. 150 F. @ 9.2 PPG mud @ 8840': Lead Slurry: Est. 4375' to 7840': 60 % excess over calculated volume: Est. @ 340 sx. Lite (65% Class 'C' + 35% Pozzalan + 6% Gel) w/ 3% Sodium Meta-Silicate + 15 #/sx. NaCl + 0.50 #/sx. cellophane + Additives: 2.76 cu.ft./sx. @ 11.8 PPG. Tail Slurry: Est. 7840' to 8840': 40 % excess over calculated volume: Est. @

190 sx. 50% Class 'H' + 50% Pozzalan + 2% Gel

w/ 3 #/sx. KCl + Additives.
1.30 cu.ft./sx. @ 14.2 PPG.



# 5. PROPOSED DRILLING FLUIDS:

The reserve pit will be constructed in two segments & will be fully lined with a minimum 12 mil thickness plastic liner to protect the surface environment and fresh water resources.

- a. 17-1/2" Surface Hole: Surface to 450': Fresh Water Spud Mud:
  Additives: Gel, Lime & LCM as needed to maintain
  circulation.
  - Est. 9.0 to 9.5 PPG @ VIS 40 to 120 sec./qt.
- b. 11" Intermediate Hole: Circulate the Reserve Pit Brine Section.
  - i. 450' to 2300': Native Mud: Fresh Water & Native Solids:
    Additives: Possible Gel sweeps & LCM as needed to maintain
    circulation and clean the hole.
    Est. 8.4 to 9.5 PPG @ VIS 30 to 34 sec./qt.
  - ii. 2300' to 4675': Native Mud: Saturated Brine & Native Solids:
    Additives: Possible Attapulgite Gels, Fresh Water Gels to
    sweep and clean the hole, field crude oil to
    reduce mud weight, shale sloughing and
    differential sticking, and LCM as needed to
    maintain circulation.
    - Est. 9.5 to 10.4 PPG @ VIS 32 to 35 sec./qt.
- c. 7-7/8" Production Hole:
  - i. 4675' to 9800': Native Mud: Fresh Water & Native Solids: Circulate the Reserve Pit Fresh Water Mud Section. Additives: Possible Fresh Water Gels to sweep and clean the hole, field crude oil and/or diesel to reduce mud weight, shale sloughing and differential sticking, and LCM as needed to maintain circulation. Est. 8.34 to 8.5 PPG @ VIS 28 - 30 sec./qt.
  - ii. 9800' to 11840': Low Solids Slightly Dispersed: Circulate in Mud Tanks.
    - Additives: Fresh Water Gel, Drispac, Soda Ash, Ben-Ex, Starch, and KCl w/ LCM as necessary to maintain circulation and stabilize shales with soltex and/or diesel if required for differential sticking.
    - Est. 8.8 to 9.5 PPG @ PV 5-22 cp., YP 5-21 pphsf., and VIS @ 34 45 sec./qt.

# 6. LOGGING, TESTING, AND CORING PROGRAM:

- a. The logging program will consist of:
  - i. DILL/SFL GR/SP (Induction Logs):
     T.D. to Intermediate Casing.
  - ii. LDT/CNL GR/CAL (Density/Neutron Porosity Logs): T.D. to Intermediate Casing.
  - iii. BHC Sonic GR/CAL (Sonic Porosity and Travel Time Logs):
     T.D. to Intermediate Casing.
- b. No cores are planned.
- c. A drill stem test is planned in the Upper Strawn Porosity:
  Anticipated Pressure = approx. 3670 PSIG
  Equiv. Mud Density @ 6.18 PPG @ 11,415'.
- d. Samples will be analyzed on-site by a geologist in order to determine total depth (T.D.) of the well. 30' samples (wet) to the base of the intermediate casing (4675'). 10' samples (wet & dry) from the base of the intermediate casing to T.D.

# 7. ABNORMAL CONDITIONS - PRESSURE - TEMPERATURE - POTENTIAL HAZARDS:

- a. Surface Hole to 450':
  Normal pressures (fresh water gradient or less) and temperatures
  (70 F. to 75 F.) are anticipated for this hole segment.
- b. Intermediate Hole from 450' to 4675':
  Saturated brine pressures (saturated salt water gradient @ 10.4
  PPG: 0.54 PSI/ft.) and normal temperatures (75 F. to 115 F.) are
  anticipated for this hole segment. No H2S is anticipated.
- c. Production Hole from 4675' to 11840': Subnormal pressures (less than the fresh water gradient @ 8.34 PPG: 0.434 PSI/ft.) and normal temperatures (115 F. to 180 F.) are anticipated for this hole segment. No H2S is anticipated although H2S detection equipment will be installed and maintained for drilling operations in this interval.

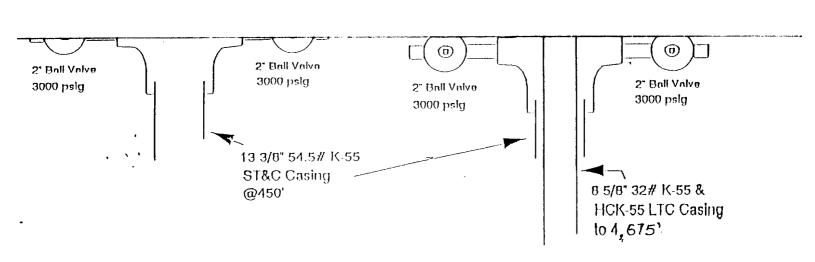
# 8. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

This proposed location is a non-standard (unorthodox) proposed location. Location construction may be commenced in late July after a surface damage agreement is reached with the surface owner, and damages are paid. Bonneville Fuels Corporation is seeking a hearing on June 29, 1995 to approve its request for an unorthodox location, and for the compulsory pooling of various unleased mineral interests. Upon granting of this request this well will be spud and drilled to a projected T.D. @ 11,840' in the Atoka Shale. Anticipated spud date is August 1, 1995. Est. 32 drilling days, Est. 10 completion days. Est. 1st production on or after September 10, 1995.

Robert A. Schwering, F.E.

Senior Engineer

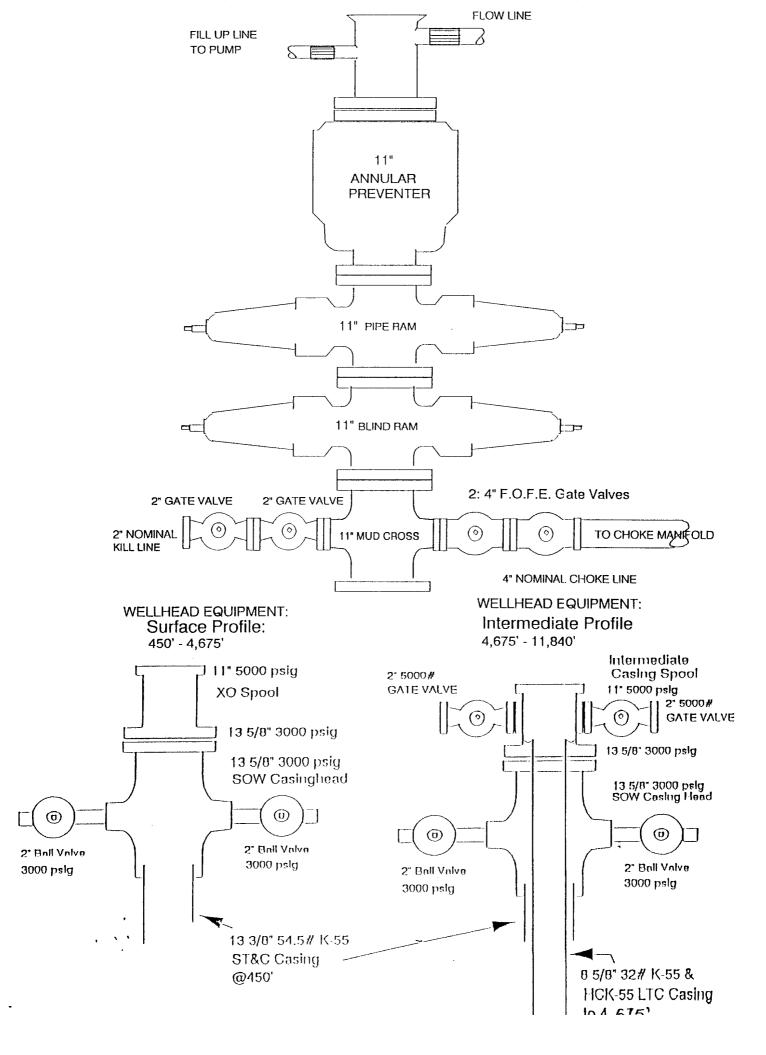
Bonneville Fyels Corporation



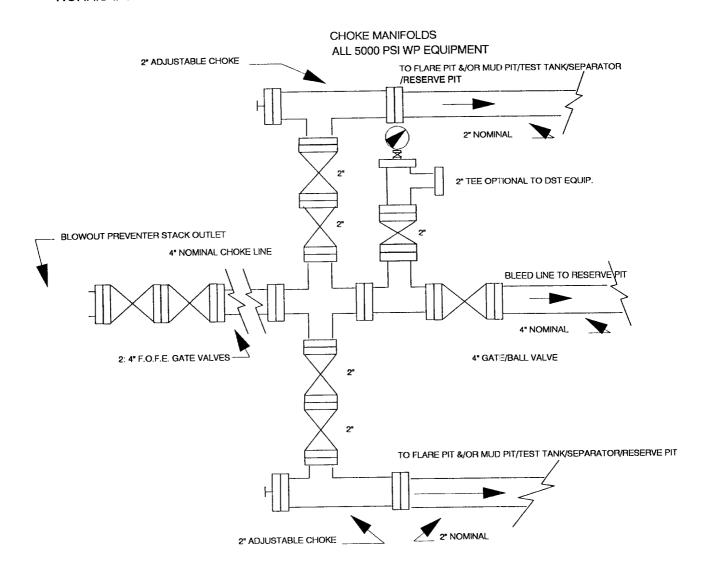
Mar Supply OFFICE

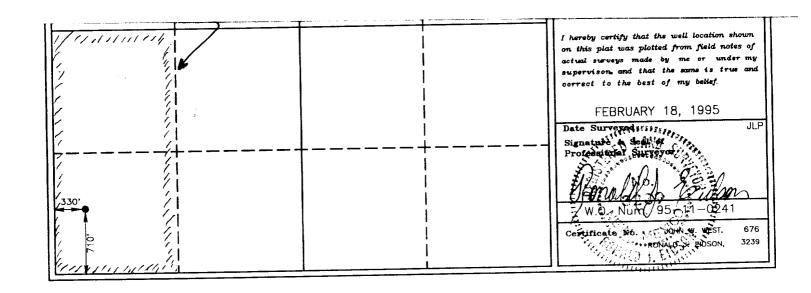
# NORRIS # 4 MINIMUM BLOW-OUT PREVENTER REQUIREMENTS ALL 5000 PSI WP EQUIPMENT

(Except Casinghead & Spools as noted below)



May Solvey





DISTRICT I P.O. Box 1980, Hobbs, NM 88240

# State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994 instruction on back Submit to Appropriate District Office State Lease - 4 Copies

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

OIL CONSERVATION DIVISION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

□ AMENDED REPORT

Fee Lease - 3 Copies

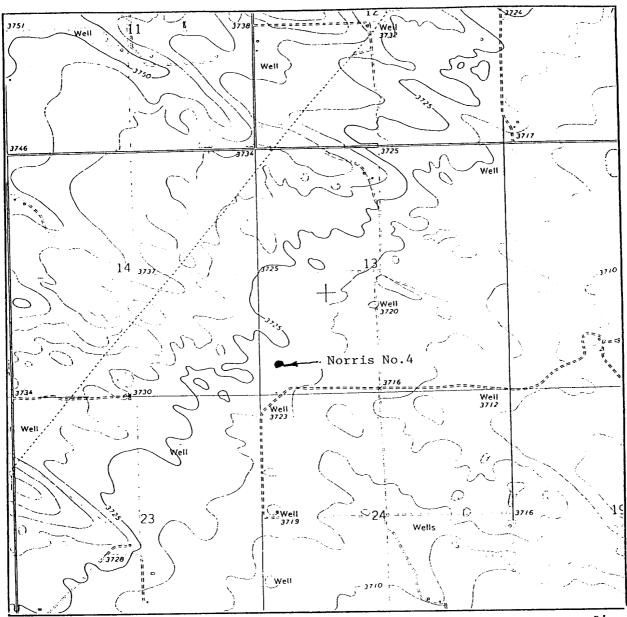
# 1000 Rio Brazos Rd., Aztec, NM 87410

API Number			1	Pool Code		Pool Name			
30-025-33197 Property Code 2158 2157			335	00	Property N NORRIS		Well Nun	Well Number	
OGRID No. 2678 2678			Operator Name					Elevation	
<del>2678</del> ~ ≺		BONNEVILLE FUELS CORP.					3722		
Surface Location  UL or lot No. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County									
UL or lot No.	Section 13	Township 17 S	Range 37 E	Lot Idn	710	SOUTH	330	WEST	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
							ļ		
Dedicated Acres	Joint of	r Infill C	onsolidation	Code Or	der No.	- 7285-A			
NO ALLOWABLE WILL BE ASSGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED									
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION									
//////////////////////////////////////			e Dedica chures	tion			Signature  Signature  Signature  Fittle  Survey  I hereby certion this plate actual survey supervison to correct to the signature of the survey supervison of the survey supervisor of the survey su	OR CERTIFICA  Ty that the well loca was plotted from fiel made by me or and that the same i he best of my belt  RUARY 18, 199	TION  from shown de notes of under my strue and er.  5  JLP  241  St. 676

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# LOC. TION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL\_\_\_5'

SEC.\_\_.13 TWP.\_\_17-S RGE.\_\_37-E

SURVEY\_\_\_N.M.P.M.

COUNTY\_\_\_\_\_Lea \_\_\_\_\_STATE\_\_\_\_N.M.

DESCRIPTION\_\_710' FSL & 330' FWL

ELEVATION\_\_\_\_\_\_3722

OPERATOR\_\_Bonneville\_Fuels\_Corp.

LEASE\_\_\_\_\_\_Norris\_No.4

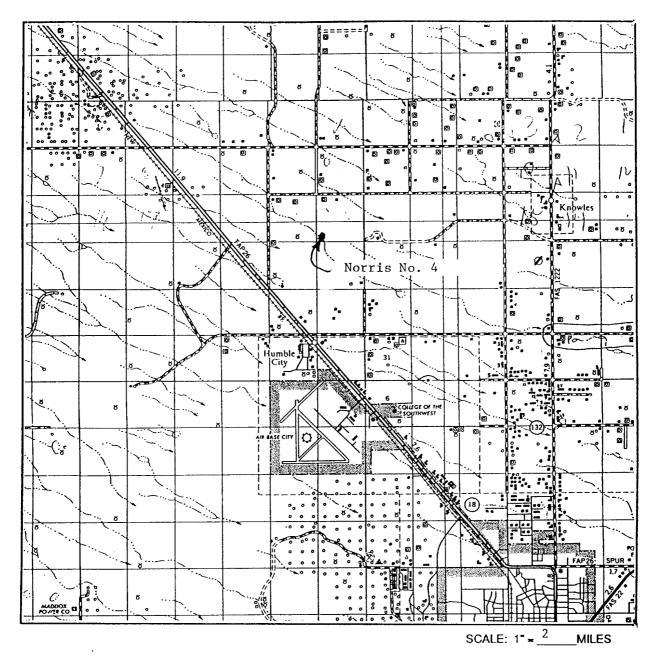
U.S.G.S. TOPOGRAPHIC MAP

Humble\_City, N. Mexico

JOHN WEST ENGINEERING HOBBS, NEW MEXICO (505) 393-3117



# VICINITY MAP



SEC.\_13 TWP.\_\_17-S RGE 37-E

SURVEY\_\_\_N.M.P.M.

COUNTY\_\_\_lea \_\_\_STATE\_\_\_N.M.

DESCRIPTION\_\_710' FSL & 330' FWL

ELEVATION\_\_\_3722

OPERATOR\_\_Bonneville Fuels Corp.

LEASE\_\_\_\_Norris No.\_4

JOHN WEST ENGINEERING HOBBS, NEW MEXICO (505) 393-3117



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