) POINT SURFACE USE PLAN

Attached to Form 3160-3
Bonneville Fuels Corporation
Avalon 1 Federal #2
Unorthodox Surface Location: 2686' FSL & 1999' FEL (Unit 'O')
Sec 1 (an irregular section of land), T.21S., R.26E. NMPM
Eddy County, New Mexico

The proposed well center was staked on 12/8/1999. The proposed location, access road, tank battery pad, and pipeline right-of-way were surveyed and staked by John West Engineering, and surveyed for archaeological impacts by Desert West Archaeology on 12/8-10/1999. An On-Site Surface Inspection was conducted by Mr. Barry Hunt (a Surface Management Specialist with the Carlsbad Area office of the Bureau of Land Management - also representing the Bureau of Reclamation) on 12/9/1999. **No significant topographical, archaeological, faunal or botanical limitations and/or obstacles to the development of this well site were identified or indicated by John West Engineering, Desert West Archaeology, or Mr. Barry Hunt.**

1. EXISTING ROADS:

Exhibit 'A' attached is a Topographic and Vicinity Map created from a splice of four USGS Quadrangle Maps (the Lake MacMillan South Quad, the Angel Draw Quad, the Carlsbad East Quad and the Carlsbad West Quad). The map indicates the existing wells (10 existing gas/oil wells) and existing roads within a 1-Mile Radius around the proposed Avalon 1 Federal #2 well. Also indicated on this map is the proximity of the northern limit of incorporation of the City of Carlsbad (approx. 2.72 miles SSE of the proposed drill-site).

Exhibit 'B' attached is a Vicinity Map prepared by John West Engineering showing the location of the well relative to the entire City of Carlsbad. Both of these maps indicate the proximity of Avalon Lake (approx. 0.25 miles south of drill site) and the Avalon Dam Site (approx. 1.28 miles SW of the proposed drill site).

DIRECTIONS:

a. From the intersection of US 285 and NM 239 in the City of Carlsbad (downtown) proceed approx. 5 miles north on NM 239 (BROWN on Exhibits A, B and 'C-1') to Brantley Dam Road (paved) and turn left. Proceed NW on Brantley Dam Road 0.65 miles (GREEN on Exhibits A, B and 'C-1') to gravel county road and turn left. Proceed SW on gravel county road 0.5 miles (BLUE on Exhibits A, B and 'C-1') to location access road entrance.

b. Turn left and proceed SE approx. 90 feet onto well pad (YELLOW on Exhibits A, B AND 'C-1').

2. PLANNED ACCESS ROAD:

The planned access road is indicated on Exhibit 'A' and Exhibit 'B' with a YELLOW coloration. This road segment is also colored YELLOW and is better seen on Exhibit 'C-1' (attached) a Location Verification Map prepared by John West Engineering.

a. The proposed new access road will be approximately 90 feet long from the existing county road SE onto the well pad.

b. The new road will have a 20' traveling surface crowned with 6" of compacted caliche with a 60 foot entrance width for turning vehicles along the existing access road and a 35 foot entrance width along the NE edge of the drill pad. The road will be flat-bladed (to remove creosote black-brush) and crowned with caliche

c. A low-water crossing will be constructed at the county road turn-off and ditched along the NE side to carry sheet-wash run-off from NE of the location and road to the low-water crossing and into the County Road bar ditch.

3. EXISTING AND PROPOSED WELLS WITHIN A 1-MILE RADIUS:

Exhibit 'A' shows wells BFC has been able to identify in the area covered by this map north and east of the Avalon Lake. The 1-mile radius of required investigation is indicated in ORANGE outline. Known gas/oil wells, proposed wells, and dry holes are shown inside the 1-mile radius, and are labeled GW/OW, PW and DH respectively.

Exhibit 'C-2' is a Well Location and Acreage Dedication Survey Plat (New Mexico Form C-102) prepared by John West Engineering (160 Acre spacing required). BFC is directionally drilling the proposed Avalon 1 Federal #2 well from an Unorthodox Surface Location to Delaware productive intervals which BFC expects to encounter in an Orthodox Bottom-Hole Location (ORANGE on Exhibits A, B and 'C-2').

a. There are four (10) existing producing oil/gas wells within a 1-mile radius of the proposed Avalon 1 Federal #2 well. These wells are colored RED on Exhibit 'A' and are labeled OW or GW.

b. There are two (2) proposed oil/gas wells within a 1-mile radius of the proposed Avalon 1 Federal #2 well that BFC is aware of. These wells are colored GREEN on Exhibit 'A' and are labeled PW.

c. There are two (2) dry holes within a 1-mile radius of the proposed Avalon 1 Federal #2 well. These wells are colored BROWN on Exhibit 'A' and are labeled DH.

d. There are NO KNOWN water wells within a 1-mile radius of the proposed Avalon 1 Federal #2 well.

4. PROPOSED PRODUCTION FACILITIES:

Bonneville Fuels Corporation has NO existing production facilities on this site at this time. Exhibit 'D' shows the location of a proposed tank battery, approx. 115' NE of the proposed well-center stake for the Avalon 1 Federal #2 well.

The Special Lease Stipulations for NM 13624 (5 Pages with appropriate portions highlighted) are attached as Exhibit 'E', pages 1 thru 6. The surface use regulation of the lands on which this proposed wellsite lies has been 'withdrawn' from the BLM to the administration of the Bureau of Reclamation because of the proximity of the Avalon Lake and Dam Sites. There are two basic stipulations in the lease:
1. That all storage tanks be located at or above an elevation of 3200' MSL **(this tank battery will be at a finished grade at or above 3196' MSL w/ 4' Berms at elevation 3200' MSL)** and
2. That all drill pads be above 3190' MSL **(the finished drill pad elevation will be at or above 3190' MSL).**

Exhibit 'D' presents a Proposed Production Facilities Layout diagram.

a. Should the well prove productive then necessary gas handling facilities (a three phase separator, and a meter facility) will be placed on the production pad as shown on Exhibit 'D'. The drill/production pad finished grade will be at 3191'+ MSL. This exceeds current BuRec Guidelines (+3190' MSL) and Special Lease Stipulations.

b. Should the well be productive of oil and/or water then the storage facilities will be placed on an elevated tank pad designed so that the finished tank battery pad elevation will be at 3196'+ MSL. Actual well productivity/safety/environmental considerations will determine the constructed configuration/size of tanks in the proposed tank battery facility. Tank battery firewalls will be a minimum height of 4' above the Tank Battery Pad grade and will encompass sufficient volume to provide storage for ALL tank contents with 1' of free board. The tank battery firewalls will be at 3200'+ MSL finished grade. This meets or exceeds current BuRec Guidelines (+3200' MSL) and Special Lease Stipulations.

c. The Tank Battery Pad and Production Pad facilities will be lined with a 30 mil plastic liner system to prevent ground water pollution.

d. A GPM HP gas pipeline crosses the section just NE of the access road. Other HP gas lines exist to the NE of the proposed well. Should the well prove productive a sales line will be laid to the pipeline most appropriate to handle the produced stream. Exhibit 'F' (a 1-Page Pipeline ROW plat) indicates an alternate pipeline route (proposed ROW) to EPNG. BFC will, however, ultimately pursue the best sales gas tie-in based on gas contract negotiations and well productivity.

5. LOCATION AND TYPE OF WATER SUPPLY:

a. FRESH WATER: BFC plans to obtain fresh water for drilling through a local water hauling service (purchased from a municipal or agricultural seller) AND may permit and drill an on-site water well in accordance with the relevant Federal and State laws.

b. BRINE WATER: BFC plans to obtain brine water for drilling through a local water hauling source by direct purchase.

6. SOURCE OF CONSTRUCTION MATERIALS:

Exhibit 'G' presents the Construction (Cut and Fill) Plan for the site. Required cuts and fills are identified. Top-Soil and Pit Spoils stockpiles from reserve pit construction are also shown.

a. CALICHE ROCK FOR TOPPING: This material will be obtained during cut-and-fill operations at the drill pad and tank battery pad, and also during reserve pit excavation. Additional caliche may need to be hauled in from a commercial pit if necessary.

b. WATER FOR COMPACTION: Hauled in per 5.a. above.

7. METHODS OF HANDLING WASTE DISPOSAL:

a. The reserve pit will be lined with a 12 mil plastic liner to prevent ground water contamination. Drill cuttings and fluids will be disposed of in the reserve pit. The drilling fluids will dry by evaporation until the resulting fill is dry enough to walk on. The liner above the dry mud level will then be removed to a sanitary land fill. The remaining pit volume will be closed with clean dry fill (Pit Spoils and Top Soil - see Exhibit 'G'). The reserve pit will be fenced thruout operations.

b. Human waste will be stored in septic facilities and sewer holes and pumped and hauled to sewage facilities. Sewer holes will be treated with slaked lime and back-filled as soon as the drilling rig moves out.

c. Trash will be stored on-site in a container to prevent wind litter. Trash will then be hauled to a sanitary land fill. Containers subject to MSDS restrictions will be cleaned out and returned to vendors. Rig junk (wire rope, etc.) and metal waste will be removed with the drilling rig.

d. Produced water will be collected in pits/test tanks and hauled to a licensed and regulated produced water disposal facility.

7. METHODS OF HANDLING WASTE DISPOSAL: Continued:

e. Produced oil will be stored on site in test tanks until production facilities are installed and it can be legally sold. Waste oil will be collected and hauled to a waste oil recycler.

8. ANCILLARY FACILITIES:

Exhibit 'H-1' indicates the proposed pad dimensions and finished elevations. Exhibit 'H-2' indicates anticipated rig equipment layout including trailers required to provide 24-hour supervision during the drilling of this well.

a. Exhibit 'H-2' indicates camp/trailer facilities required on-site to provide 24-hour site supervision. These trailers will have sewer hole or other septic facilities.

b. Exhibit 'I' indicates the location of H2S briefing and warning facilities required by the presence of H2S gas in some of the producing strata to be encountered in the drilling of this well. The H2S Safety Plan is presented as Exhibit 3 to the 8-Point Drilling Plan.

9. WELLSITE LAYOUT:

a. Exhibit 'H-1' presents the proposed layout of the wellsite.

b. Exhibit 'I' indicates the location of H2S briefing and warning facilities required by the presence of H2S gas in some of the producing strata to be encountered in the drilling of this well. The H2S Safety Plan is presented as Exhibit 3 to the 8-Point Drilling Plan.

c. Exhibit 'G' indicates the proposed cut-and-fill limits of the planned facility. **A larger 500' x 610' area was surveyed and cleared (archaeology/flora/fauna) in the event that additional pad space is required by larger than anticipated rig dimensions, site safety requirements, or the drilling of the additional proposed Avalon 1 Federal #3 well. The Avalon 1 Federal #3 well is planned to be permitted and drilled from the same pad IF the Avalon 1 Federal #2 well is entirely successful.** The reserve pit will be lined with a minimum 12-mil plastic liner.

d. Exhibit 'J' indicates a proposed secondary catchment below the wellsite to hold 12,000 Bbl. and prevent any possible Avalon Lake pollution by any pit breach or site problem. No site discharge is planned to enter this catchment and it is a safety precaution only.

10. PLANS FOR THE RESTORATION OF THE SURFACE:

a. The reserve pit will be fenced with 4 strand barbed wire thruout drilling and completion operations. Fencing will only be removed for reclamation operations. The flare pit will be back-filled as soon as completion and testing operations are ended.

b. The drill site will be kept clean and free of trash/pollution thruout drilling, completion, and production operations thrucut the life of the well.

c. Sewer holes will be evacuated, limed and filled IMMEDIATELY after drilling operations are completed. A portable toilet will be serviced and kept on-site thruout drilling, completion and production facility construction operations.

d. When the reserve pit is dry the barbed wire fence and posts will be removed and the liner will be cut above the mud-line and hauled to disposal. The pit spoils will then be used to fill the reserve pit and recontour it as nearly as possible to the original topography. The pit surface will then be harrowed parallel to elevation contour and re-seeded with the specified BLM mix parallel to the land contour.

e. When the well has been judged to be non-productive, or no longer productive, but AFTER the reserve pit has dried out and is ready to fill or has already been filled (in the case of a productive well), all surface production equipment and drilling/completion equipment will be removed to a depth sufficient to facilitate effective reclamation. Then the entire site will be recontoured as nearly as possible to the original topography. The entire location surface will then be cross-ripped with the last pass parallel to elevation contour. The new portion of the access road (constructed for this well) will be back-ripped 2 times. Then the access road and the well-site will be re-seeded with the specified BLM mix parallel to the elevation contour of the site.

11. OTHER INFORMATION:

a. TOPOGRAPHY: The land surface at this site is a gently rolling hillside rising gradually to the NE (see Exhibit 'A'). The location is above the Pecos River Flood Plain.

b. SOILS: Sandy aridisols of aeolian origin with shallow soils over caliche rocks.

c. FLORA AND FAUNA: Acacia, Creosote, brush, shrubs and grasses with a variety of Upper Chihuahuan Cacti. Mule deer, White-Tail deer, Mountain Lion, Rabbits, Skunks, Voles and Snakes are found in this area. NO ENDANGERED or THREATENED species are present.

11. OTHER INFORMATION: Continued:

d. ARCHAEOLOGY: An archaeological survey of this site was conducted by Desert West Archaeological Services out of Carlsbad, New Mexico. The report is attached as Exhibit 'K'. NO SIGNIFICANT ARCHAEOLOGICAL RESOURCES WERE FOUND IN THE SURVEYED AREA OF THE PLANNED ACCESS ROAD OR OF THE PROPOSED WELLSITE OR OF THE PROPOSED PIPELINE RIGHT-OF-WAY. A 500' by 610' area incorporating the planned wellsite, a 50' by 100' area incorporating the planned access road, and a 50' x 600' area incorporating a potential pipeline ROW were surveyed on 12/9/1999.

e. DRILLING PLAN: An 8-Point Drilling Plan with three (3) exhibits (including an H2S Safety Plan) is attached with this 13-Point Surface Use Plan to Form 3160-3.

f. INHABITED DWELLINGS: There are NO known inhabited dwellings within a 1-mile radius of this proposed wellsite. The nearest residences are +2.5 miles SE of this proposed drillsite.

12. SURFACE AND MINERAL OWNERSHIP:

a. The surface location of the proposed site and access road for the Avalon 1 Federal #2 wellsite is owned by the Federal Government of the United States of America. The permitted surface uses of these lands is controlled and administered by the Bureau of Reclamation with the assistance of the Bureau of Land Management. In conjunction with the Application for a Permit to Drill BFC will be seeking a Right-of-Way for the use of the drill-site, access road, and potential Pipeline Right-of-Way from the Bureau of Reclamation.

A copy of this Right-of-Way request is attached for your information. No site construction activity may commence prior to receiving AND fully executing this grant of Right-of-Way.

b. The minerals targeted by this well are oil and gas pays in the Delaware Fm. The planned pro-ration unit for the well is the 164.66 acres encompassed by Lots 33, 34, 39 & 40 in Section 1, T.21S., R.26E., Eddy County, New Mexico (Federal Lease NM 13624). The well is Unorthodox in terms of Surface Location and Bottom-Hole Location by virtue of the Rules of the New Mexico Oil Conservation Division. In conjunction with the Application for a Permit to Drill BFC will be seeking Administrative Approval of its requested directional drilling plan and Unorthodox Surface Location.

A copy of the Request for Administrative Approval of this Unorthodox Location is attached for your information. No actual drilling operations will commence until this Unorthodox Location and Drilling Plan is FULLY approved by the NMOCD.

13. OPERATOR'S REPRESENTATIVE:

The Operator's Representative responsible for the administration, construction, drilling, completion, testing, production and reclamation of this site is:

Mr. Robert A. Schwering, P.E., C.E.S.
Operations Manager
BONNEVILLE FUELS CORPORATION
1660 Lincoln: Suite 2200
Denver, Colorado 80264
Office: (303) 376-2564; Fax: (303) 863-1558
Cell: (303) 514-6756; Mobile: (505) 370-4527
Home: (303) 278-8020 ON CALL 24 Hours or ON-SITE.

CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access routes; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Bonneville Fuels Corporation and its contractors and subcontractors in conformity with this plan and the terms & 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.

Date: 3/4/2000

Signature:

R.A. Schwering, PE
Operations Manager; SE NM