



*Desert West*

---

ARCHAEOLOGICAL SERVICES

EXHIBIT 'k'

December 28, 1999

Mr. R.A. (Bob) Schwering  
BONNEVILLE FUELS CORPORATION  
1600 Lincoln, Suite 1800  
Denver, Co 80264

Dear Mr. Schwering:

Enclosed please find your copy of Desert West Archaeological Services (DWAS) Clearance Report for BONNEVILLE FUELS CORPORATION's proposed Avalon "1" Federal Well No. 2 (2686' FSL; 1999' FEL) and Avalon "1" Federal Well No. 3 (2762' FSL; 2075' FEL), access road and pipeline in Section 1, T21S, R26E, NMPM, Eddy County, New Mexico. Four isolated manifestations (IM) were encountered on the well location. No cultural resources were encountered on the access road or pipeline. Archaeological clearance is recommended for BONNEVILLE FUELS CORPORATION's proposed Avalon "1" Federal Well No. 2 (2686' FSL; 1999' FEL) and Avalon "1" Federal Well No. 3 (2762' FSL; 2075' FEL), access road and pipeline as presently staked. No further archaeological work should be required.

The Bureau of Land Management will review this report and make the final decision on archaeological clearance for your project.

If you have any questions, please call our office.

Sincerely,

  
Arita Slate

Enclosure

Xc: Bureau of Land Management, Carlsbad Field Office, Carlsbad, NM (2)

*RAS & Archaeologist inspected EVERY  
square foot of construction site*

**TITLE PAGE/ABSTRACT/ NEGATIVE SITE REPORT**  
**CARLSBAD FIELD OFFICE**

BLM/ RDO 1/95

1. BLM Report No.	2. (ACCEPTED)      (REJECTED)	3. NMCRIS No.: 66733
4. Title of Report (Project Title): Archaeological survey of BONNEVILLE FUELS CORPORATION'S proposed well pad location, access road, and pipeline for the Avalon 1 Federal No. 2 (2686' FSL, 1999' FEL) and the Avalon 1 Federal No. 3 (2762' FSL, 2075' FEL) in Section 1, T21S, R26E, NMPM, Eddy County, NM.		5. Project Date(s): 12-09-99
		6. Report Date: 12-20-99
7. Consultant Name & Address: Direct Charge: David Wilcox Name: Desert West Archaeological Services Address: P.O. Box 645, Carlsbad, NM 88220 Authors Name: Stephen Smith Field personnel names: Stephen Smith Phone (505) 887-7646		8. Permit No.:  BLM: 123-2920-99-U STATE: NM-99-077
		9. Consultant Report No. DWAS 99-17 D
10. Sponsor Name and Address: Indiv. Responsible; R.A. (Bob) Schwering Name: BONNEVILLE FUELS CORPORATION Address: 1600 Lincoln, Suite 1800 Denver, Co 80264 Phone (303) 863-1555 (ext. 215)		11. For BLM Use only.
		12 ACREAGE: Total No. of acres surveyed: 8.39 Per Surface Ownership: Federal: 8.39 State: 0 Private: 0
13. Location: (Maps Attached if negative survey) <ul style="list-style-type: none"> <li>a. State: NM</li> <li>b. County: Eddy</li> <li>c. BLM: Carlsbad Field Office</li> <li>d. Nearest City or Town: Carlsbad, NM</li> <li>e. Location: T21S, R26E; Section 1: Avalon 1 Federal No. 2; [SW ¼, NE ¼][NW ¼, SE ¼]  Avalon 1 Federal No. 3; [SW ¼, NE ¼] [NW ¼, SE ¼]  Access Road; [SW ¼, SW ¼, NE ¼]  Pipeline; [SW ¼, SW ¼, NE ¼] [NW ¼, SW ¼, NE ¼] [NE ¼, SW ¼, NE ¼]</li> <li>Well Pad Footages: Avalon 1 Federal No. 2: (2686' FSL, 1999' FEL)  Avalon 1 Federal No. 3: (2762' FSL, 2075' FEL)</li> <li>f. USGS 7.5' Map Name(s) and Code Number(s): ANGEL DRAW, NM (Prov. Ed. 1985) 32104-E2</li> <li>g. Area: Block; Impact : 500' X 610'  Surveyed: 500' X 610'  Linear: Impact: 50' x 606.8'      Access Road: 50' X 89', Pipeline: 50' X 517.8'  Surveyed: 100' x 606.8'</li> </ul>		

14. a. Records Search:

Location: BLM and ARMS by Stephen Smith and Arita Slate

Date: 11-18-99

List by LA # all sites within .25 miles of the project:

(Those sites within 500' are to shown on the project map)

b. Description of Undertaking: Class III pedestrian archaeological survey of BONNEVILLE FUELS CORPORATION'S proposed well pad location, access road, and pipeline for the Avalon 1 Federal No. 2 and Avalon Federal No. 3 in Section 1, T21S, R26E. Both well head locations are within the surveyed 500' x 610' well pad, and will have off-set locations for the bottom of each well head (directional drilling). This project has been impacted previously by a GPM pipeline and accompanying two-track road, and is intersected along the western boundary of the well pad location by County Road 601. A small hill within the project has been mechanically excavated and caliche piled on the hill.

c. Environmental Setting (NRCS soil designation; vegetative community; etc.):

Topography: Gentle rolling hills leading into the Pecos River flood plain

Vegetation: Acacia, creosote, horsebrush, crucifix bushes, and grasses

NRCS : Simona-Pajarito association: Sandy, deep soils and soils that are shallow to caliche; from wind-worked deposits

d. Field Methods:

Transect Intervals: Straight and zig-zag transects, spaced not greater than 15 meters apart

Crew Size: One archaeologist

Time in Field: 3 Hours

Collections: N/A

(CONTINUE WITH REPORT FORM ONLY IF THERE ARE NO ELIGIBLE CULTURAL PROPERTIES.  
THE REMAINDER OF THIS FORM THEN BECOMES THE NEGATIVE SURVEY REPORT)

15. Cultural Resource Findings: Four isolated manifestations (IM) were encountered on the well pad. No cultural resources were encountered on the access road or pipeline.

a. Identification and description: (Location shown on Project map)

I.M. No. 1: [NW ¼, NW ¼, SE ¼] Metal coffee can, 5" diameter x 5 ¼" length

I.M. No. 2: [SE ¼, SW ¼, NE ¼] Metal portion of a wheel barrow, 32 ½" diameter x 26 ¼" wide

I.M. No. 3: [NW ¼, NW ¼, SE ¼] Metal can, bayonet opened, 4 ½" length x 3 ¼" diameter

I.M. No. 4: [NW ¼, NW ¼, SE ¼] Solder seal can, crushed

16. Management Summary (Recommendations):

Archaeological clearance for BONNEVILLE FUELS CORPORATION'S proposed well pad location, access road, and pipeline for the Avalon 1 Federal No. 2 and Avalon 1 Federal No. 3 in Section 1, T21S, R26E, is recommended as presently staked. The BLM and DWAS are to be notified immediately if any cultural resources are encountered during construction activity.

I certify that the information provided above is correct and accurate to the best of my knowledge and meets all appreciable BLM standards.

Responsible Archaeologist

Stephen Smith  
Signature

12-20-99  
Date

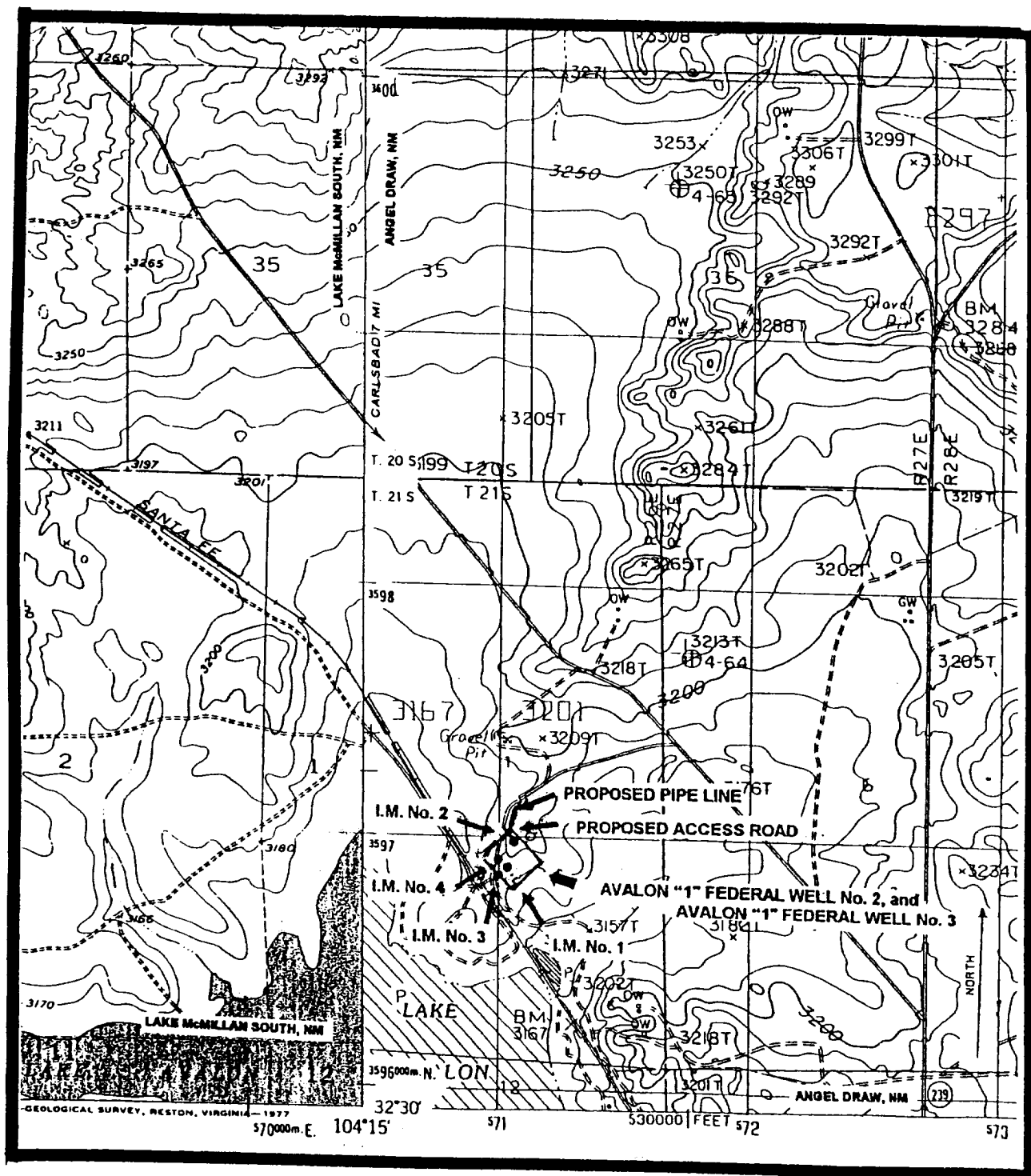


Figure 1. Map showing the location of BONNEVILLE FUELS CORPORATIONS's proposed well pad, access road and pipe line for both the Avalon "1" Federal Well No. 2 (2,686' FSL, 1999' FEL) and the Avalon "1" Federal Well No. 3 (2,762' FSL, 2,075' FEL). This project area is situated in Section 1, T21S, R26E, NMPM, Eddy County, New Mexico. Map references: USGS 7.5' Series: Lake McMillan South, NM (1955), 32104-E3, and Angel Draw, NM (Prov. Ed. 1985), 32104-E2.

Drawn by Roc H. Indermill.