

PO Box 5513 Farmington, NM 87499 (505) 325-5449 Fax (505) 325-6585

October 31, 2001

Jim Lovato Bureau of Land Management Farmington District Office 1235 La Plata Highway, Suite A Farmington, NM 87401

Charlie Perrin New Mexico Oil Conservation Division District 3 - Aztec Office 1000 Rio Brazos Road Aztec, NM 87410

**Brian Davis** Bureau of Land Management 435 Montano Road, NE Albuquerque, NM 87107-4935

> RE: Modification of Drilling Plan Four (4) Drill Wells Sandoval & McKinley County, NM Late 2001 – Confidential

## Gentlemen:

I am writing this letter to follow up upon recent phone conversations that I have had with Mr. Lovato and Mr. Davis regarding setting surface casing with a surface casing setter rig rather than a traditional rig and Synergy's coring plans for these three (3) wells. I am sending a copy of this letter to Mr. Charlie Perrin at the Aztec Office of the NMOCD for his approval as well.

Synergy Operating, LLC is planning to drill Four (4) wells in the 4<sup>th</sup> Quarter of 2001 in both Sandoval and McKinley Counties, NM. One (1) of the four (4) wells is being drilled to test a Dakota Channel Sand demonstrated on 3D Seismic, the Bois d' Arc Encino 15 # 1 (A-Sec 15-T20NR05W). Three (3) of the wells are being drilled to test the Menefee Coal Beds along the Chaco Slope, the Bois d' Arc Divide 22 # 1 (N-Sec 22-T21NR05W), the Bois d' Arc Cejita Blanca 33 # 1 (M-Sec 33-T21NR05W), and the Bois d' Arc Wash 36 # 1 (J-Sec 36-T20NR05W).

## For all Four (4) Wells:

Synergy Operating, LLC is requesting approval, from the appropriate offices, to spud a 12-1/4" hole with MOTE drilling, Inc, of Farmington, NM. MOTE would drill the surface hole with air to the permitted depths. Three of the wells are approved for a surface hole depth of 150 feet, while the Encino 15 # 1 will have a surface hole depth of 225'.

After reaching TD on this surface hole, MOTE would then run 8-5/8" 24# J-55 casing to the hole TD (with 4 centralizers), followed by BJ Services cementing the casing string in place to surface with the appropriate volume of Class A/B cement. The casing will be cemented using a string of 1" tubing placed in the 12-1/4" x 8-5/8" annulus. This tubing will be raised several times to allow for the cement to be properly brought to surface and ensure good hole fill-up. The density of the cement prior to placement will be tested with a mud balance to ensure its proper density.

Burlington Resources, Inc. has recently completed a thirty (30) plus well pilot program setting surface casing in this same manner within the San Juan Basin. Use of this technique has allowed Burlington not only to save costs, but to efficiently set the surface casing per all governmental regulations more timely. I have had conversations with drilling engineer, Mr. Eric Giles at Burlington, regarding their surface casing setting program, and he indicated to me that the results were positive.

Part of the reason that Synergy is requesting approval of the surface-casing setter is related to our second modification request to the drilling plan.

## Three (3) Menefee Wells:

With regard to the Bois d' Arc Divide 22 # 1 (N-Sec 22-T21NR05W), the Bois d' Arc Cejita Blanca 33 # 1 (M-Sec 33-T21NR05W), and the Bois d' Arc Wash 36 # 1 (J-Sec 36-T20NR05W), Synergy Operating, LLC is requesting approval to drill the wells in the following manner.

In order to properly evaluate the Menefee coal bed intervals, A wireline coring rig, supplied by Dynatec Drilling, Inc. of Salt Lake City, UT, will be utilized to drill a 6-3/4" hole out from under the surface casing. This 6-3/4" hole will be rotary mud drilled until reaching planned core points within each respective well. Upon reaching the planned core points, the rotary bit will be tripped from the well and a 5-5/8" coring bit tripped in the well. This coring bit will allow for 3-1/3" whole core to be cut. This whole core is drilled in ten (10) foot segments that can be wireline retrieved to surface. By allowing the core to be transported to the surface within 2 to 5 minutes, the stored natural gas content of the coal beds can be more accurately determined.

After reaching the permitted total depth for each well, a 6-3/4" bit will be utilized to ream the existing hole to a larger size. We anticipate based upon past drilling records in the area that the actual hole size will enlarge to be approximately 7" to 7-1/8" in size. A 7-1/16" 3000# double gate BOP, and a stripping rubber, will be utilized for well control purposes during all operations.

After completing our openhole wireline logging operations, we plan to cement 5-1/2" 15.5# J-55 production casing as originally permitted to surface. Synergy will run centralizers and turbolizers on the casing string. Synergy is requesting that a minimum number of centralizers be required because of the tight hole tolerance. The casing collars on the 5-1/2" production casing will be 6.051" in size. The turbolizers will have a minimum size of 6.500" and the centralizers will have a minimum diameter of 6.375". This amount of hole standoff should be more than adequate to ensure quality cement coverage.

During completion operations, Synergy Operating, LLC is planning to run a cement bond log from PBTD to surface to ensure proper zonal isolation of all formations. Should primary cement coverage not meet governmental or completion requirements, squeeze cementing operations will be performed during completion operations to satisfy these requirements.

The change to the currently approved drilling plan is to allow for the drilling of a smaller production hole, 6-3/4" diameter vs. 7-7/8" diameter. The Bois d' Arc Encino 15 # 1 (A-Sec 15-T20NR05W), will have a 7-5/8" production hole as originally permitted.

These three (3) wells are the first Menefee coalbed exploration wells to be drilled within the San Juan Basin, to our knowledge. We appreciate your assistance in helping us gather our required information.

Please find attached a sundry notice with the appropriate drilling plan changes listed. I can be reached at my office at (505) 566-3725 or on my cellular phone at (505) 320-1751. We would like to commence drilling the surface hole with MOTE on the Divide 22 # 1, on or about November 5<sup>th</sup>, 2001.

Warm regards,

Thomas E. Mullins Engineering Manager

tem Bois d' Arc General File