(SUBMIT IN TRIPLICATE)

SANTA FE

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

078872-A Lease No. Designated Drig. Unit

1. - M. A. SUNDRY NOTICES AND REPORTS ON WELLS

		REPORTS ON WELLS
NOTICE OF INTENTION TO CHANGE PL	SUBS	EQUENT REPORT OF WATER SHUT-OFF EQUENT REPORT OF SHOOTING OR ACIDIZING
NOTICE OF INTENTION TO TEST WATER	SUBSE	EQUENT REPORT OF SHOOTING OR ACIDIZING EQUENT REPORT OF ALTERING CASING
NOTICE OF INTENTION TO RE-DRILL OF	S REPAIR WES	EQUENT REPORT OF SHOOTING OR ACIDIZING EQUENT REPORT OF ALTERING CASING EQUENT REPORT OF REDRILLING OR REPAIR EQUENT REPORT OF ABANDONMENT
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(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate readding jobs, cementing points, and all other important proposed work)

(SEE ATTACHED SHEET)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be common THE FRONTIER REFINING COMPANY

410 BOSTON BUILDING Address.... DENVER, COLORADO

Title K. C. Forcade, Geologist

U. S. GOVERNMENT PRINTING OFFICE 16-8437-4

The Bolack #1 well, C-SWNENE 28-27N-11W, was completed May 23, 1951 in the Pictured Cliffs at a total depth of 2026 CC for an initial gauge of 1,210 MCF of gas per day. The first production from this well was January 5, 1952 to the El Paso Natural Gas Company and up to the date of June 1, this well has produced a total 168 days and a total volume of 20,403 MCF, for an average of 121 MCF per day.

During the course of the drilling of this well, a blow-out occurred at approximately 1658' in the Fruitland sand, at which point the hole was unloaded of mud by the gas volume present in this sand. After the flow of gas was finally killed with heavy mud, rotary drilling continued to the Pictured Cliffs sand where it was completed. From the Schlumberger electric log of this hole, it would appear that the Fruitland sand occurs from 1643' to 1667' with an approximate thickness of 24 feet.

The British-American #2 Douthit, located in the C-SWNENE of Section 27, T. 27 N., R. 11 W., approximately one-half mile east of our #1 Bolack well, is presently producing from the Fruitland sand in amounts anywhere from 12 to 20 million cubic feet per month. By plugging off the Pictured Cliff sand in the #1 Bolack well and perforating the casing opposite the Fruitland sand at depths of approximately 1650', it is felt that the pipeline take from this well might be increased some 5 to 10 times over and above the present take. It is felt that the Fruitland sand area is rather limited; probably in the neighborhood of approximately half a mile wide to 2 to 2½ miles long. However, the 750# BHF is abnormally high compared to the 460# BHP of the Pictured Cliff sand. Naturally, with this limited area, the sand lense will be depleted in relatively short time, and when that occurs we would hope to be able to squeeze off the Fruitland sand and re-open the Pictured Cliff sand and start producing from this zone again. Following is the procedure we submit for your approval to carry on this plug back work:

- (1) Set a drillable plug in $5\frac{1}{2}$ casing at approximately 1800' with 100' of cement on top.
- (2) Perforate 5½ casing at 1650' with a limited number of holes. If well blows dry gas finish shooting remainder of Fruitland sand zone. If well shows water and slight gas after initial shots, these holes will be squeezed with sufficient cement in stages to assure a good behind the casing job. After squeeze the Fruitland sand will be shot in its entirety, 1" tubing run and well placed on production.



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