## ENSERCH EXPLORATION NO.

P. O. Box 4815 Midland, Texas 79704 915-682-9756 Leonard Kersh
District Production Manager
West Texas District
Production Division

December 17, 1981

New Mexico Department of Energy and Minerals Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501

Re: Application for Down-hole

Commingling of the Harvey No. 1

## Gentlemen:

Enserch Exploration, Inc. hereby requests authority for down-hole commingling of the Mississippian and Pennsylvanian formations in the Harvey No. 1, located in Roosevelt County, New Mexico.

The subject well was TD'd July 3, 1981, and completed in the Mississippian from 8244'-8256'. The final results indicated a marginal oil producer since recovery after seven hours of swabbing was 16 bbls of oil. After setting a retrievable bridge plug, the zone was temporarily abandoned and the Pennsylvanian formation was tested from 8190'-8196'. The interval initially potentialed for 243 bopd; however, production has declined to a rate of approximately 40 bopd.

In accordance with Rule 303-C of the OCD Rules and Regulations, information requested upon application of a permit for down-hole commingling of the two zones is attached.

Very truly yours

Leonard Kersh

District Production Manager

LK/NAL/mh

Attachments

cc: Jerry Sexton - Hobbs District NMOCC

Operator - Enserch Exploration, Inc. P.O. Box 4815 Midland, Texas 79704-4815

Lease - Annie Harvey

Well - No. 1

Location - Sec. 6, T5S, R33E 1980' FSL, 1980' FEL Roosevelt County, New Mexico

Pools to be Commingled - Peterson (Mississippian) Pool Dora (Pennsylvanian) Pool

- Attached is a copy of Form C-116 showing the amount of oil, water, and gas produced from the Penn formation during the 24-hour test.
- Before completing in the Penn, the Mississippian formation was perforated and swabbed for seven hours; 16 bbls of oil were recovered, along with a good show of gas. This zone, however, was not potentialed.
- The subject well was perforated from 8190'-8196' (total shots=7) through the Penn formation and treated with 2000 gallons of 15% MCA acid. A potential test was run on July 22, 1981, recovering 243 BOPD, 383 MCFPD, and 13 BWPD. Currently, the well is pumping approximately 40 BOPD. The Mississippian was perforated from 8244'-8256' (total shots=10), and was acidized with 5000 gallons of 15% HCl NEFE.
- Neither zone is capable of flowing. Both will have to be artificially lifted. Estimated bottom hole pressure for the Penn is approximately 2500 psi, and for the Missisippian, 2030 psi.
- Fluid Description Oil recovered during the potential test on the Penn formation indicated a gravity of 46.9 API. The gravity of the oil recovered while swabbing the Mississippian was not determined. However, Mississippian oil produced from the offset Finley No. 1 has a gravity of 40.8 API.
- The subject well was completed in July 1981; therefore, oil production from both zones is considered newly discovered and will receive a price of \$35.00/bbl.

- The Harvey No. 1 is currently producing 40 BOPD from the Penn formation. Therefore, production of over 40 BOPD will be allocated to the production from the Mississippian formation.
- Enserch Exploration, Inc. is the operator of all offsetting production and has 100 percent Working Interest and 75 percent Net Revenue Interest in both the Mississippian and Pennsylvanian formations.
- The Mississippian and Pennsylvanian formations have common royalty interest.

## NEW MEXICO OIL CONSERVATION COMMISSION GAS-OIL RATIO TESTS

9 5 Revised 1-1-65

		Annie Harvey	1 A A A A A A A A A A A A A A A A A A A		Box 4815, Midland, TX	Address	Encerch Exploration Inc	Operator
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		47	GAS M.C.F.	TEST	Special			
•		1516/1	CU.FT/BBL	GAS - OIL	[0]			

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

will be 0.60. Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

ledge and belief. is true and complete to the best of my know-I hereby certify that the above information

(Signature)

District Production Manager

(Tide) 1981

December 16,

(Date)

