dugan production corp.

RECEIVED
SEP 28 1984
OIL CONSERVATION DIVISION
SANTA FE

September 26, 1984

Mr. Richard L. Stamets, Acting Division Director
New Mexico Oil Conservation Division
P O Box 2088
Santa Fe, NM 87501

RE: Request for Administrative Authorization for
Downhole Commingling of Bisti Lower Gallup
and Basin Dakota Pools
Dugan Production Corp.'s Muddy Mudda #1
Unit D, Section 21, T24N, R9W, NMPM
San Juan County, New Mexico

Dear Mr. Stamets:

We are writing to request administrative approval to downhole commingle the production of our Muddy Mudda #1 well. The subject pools are the Bisti Lower Gallup and the Basin Dakota.

The Muddy Mudda #1 was spudded April 27, 1984 and completed May 24, 1984. 4½" casing was cemented at 6507' RKB with a plugback TD of 6449' RKB. The Gallup interval was perforated 5065-5477' RKB with a total of 41 holes and fraced with 72,000 gal. of slick water and 94,098 lbs. of 20/40 sand. The Dakota interval was perforated 6384-6407' with 13 holes and fraced with 30,000 gal. of slick water and 17,768 lbs. of 20/40 sand. To date the well has not been produced other than initial testing and remains shut in pending action on this application.

Based upon our experience in this area and upon a study of several Gallup and Dakota wells in this area, we anticipate the Muddy Mudda #1 will be a marginally productive well. Initial production tests yielded 32 BOPD and 56 MCFD from the Gallup interval and 500 MCFD plus 8 bbl. condensate per day from the Dakota interval. We expect actual production to initially average 8 BOPD and 135 MCFD total from both horizons on a sustained basis. The initial rates predicted for each zone are based upon an evaluation of several single Gallup and single Dakota wells in this immediate area. It was found that under sustained production the Gallup initially produced at 18.6% of the reported initial potential and the initial producing GOR approximated that reported on the initial potential. For the Dakota zone it was found that the initial sustained production averaged 25.3% of what was reported on the initial potential form and that the condensate recovery averaged 16.0 bbl. per MMCF. Applying these factors, it is expected the production by zone will average 6 BOPD plus 10.5 MCFD from the Gallup and 125 MCFD plus 2.0 bbl. condensate per day from the Dakota. It should be noted that the predicted commingled rate of 8 BOPD plus 135 MCFD is optimistic with respect to the actual commingled stream in Dugan Production's Holly #1, which offsets the subject well approximately one-half mile to the north. (Avg. rate during 7/84 for the Holly #1 was 3.65 BOPD plus 50.6 MCFD.)

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87499 • PHONE: (505) 325-1821

Referring to the attached map (Figure No. 1), it can be seen that the subject well is located in an area where seven other wells have been authorized to commingle the Gallup and Dakota downhole as a result of marginal prductivity in both zones.

The nearest Gallup producing well is approximately one half mile to the north in Dugan Production's Holly #1, which is currently commingled with the Dakota and the commingled stream has averaged 3.0 BOPD plus 39 MCFD during the first seven months of 1984 (3.65 BOPD plus 50.6 MCFD during July 1984). The Gallup is also producing or has produced in three other wells within a one mile radius of the Muddy Mudda #1. The Schwerdtfeger #1, operated by Benson-Montin-Greer Drilling Corp., located in the SW NE of Sec. 17, T24N, R9W, approximately one mile to the northwest, was plugged and abandoned in February 1969 with a cumulative production of 14,514 BO. This well was completed with an initial potential of 51 BOPD and produced with a stabilized initial production of 11.2 BOPD. Dugan Production's Mary Anne #1, located in the SW SW of Sec. 9, T24N, R9W, was completed with an initial potential of 96 BOPD; however, upon placing on production, the first month's initial production averaged 12.8. The Mary Anne #1 has produced a total of 7,061 BO as of 8-1-84 and during the first seven months of 1984 produced a total of 185 BO, averaging approximately 1 BOPD with a GOR of 2378. The third Gallup well within a one mile radius of the Muddy Mudda #1 is Dugan Production's South Huerfano #1, located in the SW SW of Sec. 15, T24N, R9W. This well has produced a total of 11,507 BO and during the first 7 months of 1984 produced 191 BO plus 9273 MCF and is currently averaging approximately 1.0 BOPD with a GOR of 48,550.

The nearest Dakota completion is in Dugan Production's Holly #1, located in the NW SW of Sec. 16, T24N, R9W, approximately one half mile to the north. This well was completed with an initial potential of 81 MCFD from the Dakota and the Dakota is currently producing commingled downhole with the Mancos. As mentioned previously, the commingled stream has averaged 3.0 BOPD plus 39 MCFD during the first seven months of 1984 and averaged 3.65 BOPD plus 50.6 MCFD during July, 1984. The nearest well producing only from the Dakota is Dugan Production's Harvey #2, located approximately one mile to the west in the NW of Sec. 20, T24N, R9W. During the first seven months of 1984 production from the Harvey #2 has averaged 43.8 MCFD plus 1.82 bbls. condensate per MMCF. The Harvey #2 has been on production since October 1981 (34 months) and has produced a total of 52.9 MMCF as of August 1, 1984. The next closest Dakota well is two miles away and, as evidenced by the two Dakota wells discussed above, the Dakota in this area is not well developed.

Analysis of open hole logs in the intervals perforated indicated that within the 412' overall interval perforated in the Gallup (5065-5477') a total of 41 feet of pay with an average porosity of 9.8% exists and within the 23' gross interval perforated in the Dakota (6384-6407') a total of 16 feet of pay with an average porosity of 10.5% and water saturation of 39% exists. Based upon volumetric calculations and

utilizing a prediction of production performance developed from our study of several wells in this area, we estimate that the ultimate recovery from the Gallup will be 11,600 BO plus 34.8 MMCFG while recovery from the Dakota will be 234.7 MMCF plus 2,800 bbls. of condensate for a total of 14,400 bbls. of oil and/or condensate plus 269.5 MMCF of gas. These figures incorporate an initial decline rate of 40% per year for the first two and one-half years of production with the rate stabilizing at an annual decline rate of 7% per year for the commingled stream. The ultimate recovery per zone and the respective percentage each bears to the total is summarized as follows:

	Gallup	Dakota	Total
Gas	34.8 MMCF (13%)	234.7 MMCF (87%)	269.5 MMCF
Oil	11,600 bbls. (81%)	2,800 bbls. (19%)	14,400 bbls.

Dugan Production would like to use the above percentages, based on ultimate recoveries, to allocate production between the subject horizons. These allocation factors are consistent with previously authorized allocation factors of seven downhole commingled wells in the area (See Table 1).

The ownership of each of the subject pools is common, since Dugan Production corp. holds 100% of Federal Lease NM 36474, which covers the N/2 of Sec. 21. The 80 acre Gallup production unit comprises the N/2 NW/4 of Sec. 21 and the 320 acre Dakota production unit covers the N/2 of Sec. 21. We have enclosed a sketch depicting the offsetting lease ownership (Figure No. 2). Please note that of the ten offsetting 160 acre tracts, Dugan Production has the leasehold interest for three, representing 30% of the offset acreage.

Formation pressures have not been measured in the Muddy Mudda #1, but based upon our experience in the seven other commingled wells in this area (all operated by Dugan Production), the pressure guidelines of Rule 303.C. will not be exceeded and cross flow between the subject horizons is not expected to be a significant problem. We also plan to rod pump this well with the pump landed at the Dakota perforations. The Gallup and Dakota formations are not fluid sensitive; in fact, both zones were stimulated using a water-based treating fluid. The produced fluids are compatible in the well bore, as evidenced by our other commingled wells.

Being that the commingled Muddy Mudda #1 will be a marginal producer and neither zone will justify dual production equipment, without authorization to commingle in the well bore, the Gallup formation will likely not be produced, resulting in the loss of production and revenues.

In summary, the production from the Bisti Lower Gallup and Basin Dakota pools in Dugan Production Corp.'s Muddy Mudda #1 is anticipated to be marginal and, thus, we request that Dugan Production Corp. be allowed to downhole commingle production from this well. It is our belief that such authorization will result in an increased hydrocarbon recovery from this lease and that correlative rights will be protected.

By copy of this letter we have notified the Aztec office of the NMOCD and the Farmington office of the Bureau of Land Management of our application to downhole commingle the Muddy Mudda #1 well. The offset operators have also been notified of this application by separate letter, copies of which are attached.

If you have any questions regarding this matter, please contact me or John Roe of this office.

Respectfully,

Steve Folk

Steve Folk
Geologist

SF:fp

Attachments

cc: NMOCD, Aztec
BLM, Farmington

Table No. 1

Allocation Factors for Commingled Gallup-Dakota Wells

Operated by Dugan Production Corp.

Township 24 North, Range 9 and 10 West

San Juan County, New Mexico

		April Surprise #4 R-7210	Holly #1 R-7143	Merry May #1 R-6571	July Jubilee #1 R-6826	June Joy #2 R-6396	Big Eight #1E R-6825	MF #3 DHC-471
Oil								
	Gallup	85%	95%	85%	90%	80%	90%	85%
	Dakota	15%	5%	15%	10%	20%	10%	15%
Gas								
	Gallup	15%	80%	15%	10%	80%	13%	80%
	Dakota	85%	20%	85%	90%	20%	87%	20%

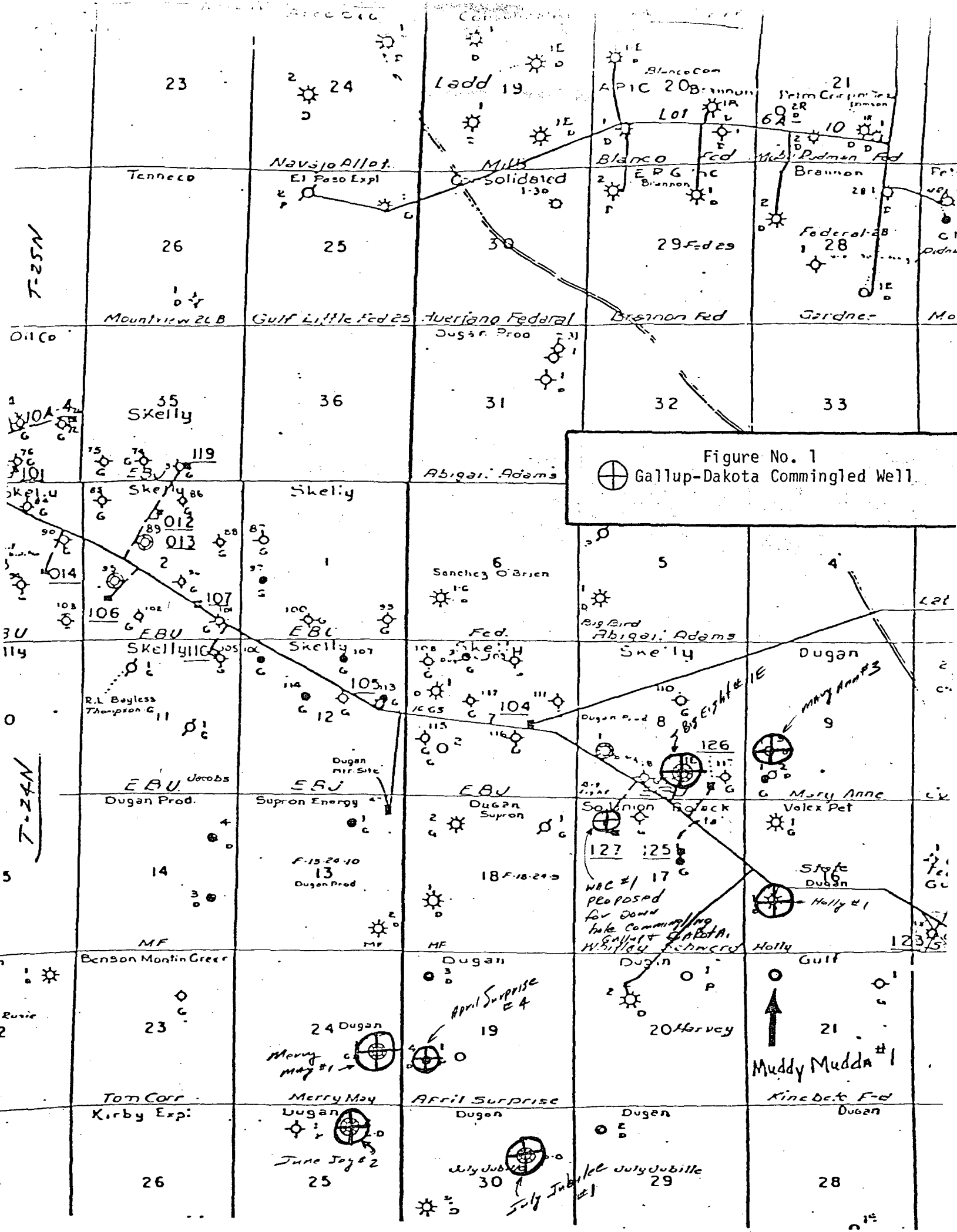
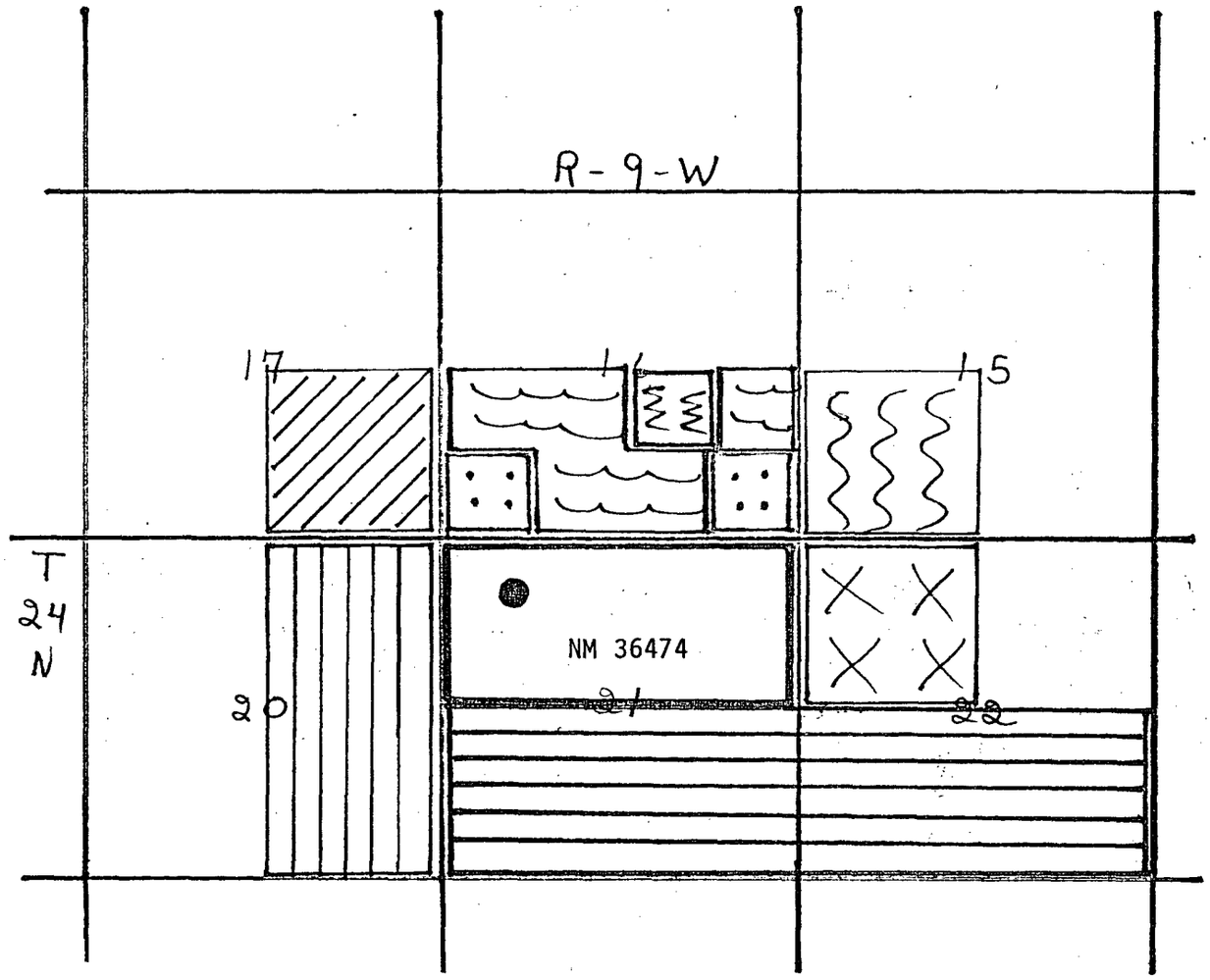


Figure No. 1
Gallup-Dakota Commingled Well
T-25N
T-24N
Navajo Allot.
Mills
Blanco Fed
Tenneco
El Paso Expl
Solidated
1-30
EPG Inc
Brannon
Federal-28
Mountview 26 B
Gulf Little Fed 25
Huerfano Federal
Brannon Fed
Gardner
Oil Co
Skelly
Abigail Adams
Sanchez O'Brien
Fed.
Big Bird
Skelly
Dugan
R.L. Boyless
Thompson G
EBU
Jacobs
Dugan Prod.
EBJ
Supron Energy
Dugan Mtr. Site
EBV
Dugan
Supron
Big Eight #1E
Mary Anne #3
Mary Anne
Volex Pet
WAC #1 proposed for down hole commingling Gallup & Dakota
Holly #1
Holly
Benson Montin Greer
Tom Carr
Merry May
April Surprise
Harvey
Muddy Mudda #1
Kinbeck Fed
Kirby Exp.
June Joy #2
July Jubille
July Jubille #1



NOT DRAWN TO SCALE

Federal Lease SF 078859
Reynolds Mining Corp. 50%
Box 9911
Corpus Christi, TX 78408

Conoco, Inc. 50%
Box 460
Hobbs, NM 88240

State Lease LG-1035-3
Holly Energy, Inc. 87.5%
717 N. Harwood St., Suite 2600
Dallas, TX 75201

Read & Stevens 12.5%
Box 1518
Roswell, NM 88201

State Lease E-6644-18
Valex Petroleum, Inc.
1580 Lincoln St., Suite 730
Denver, CO 80203

State Lease B-10889-23
Amax Petroleum Corp., et al
P O Box 42806
Houston, TX 77042

Federal Lease NM 45208
Dugan Production Corp.

Federal Lease NM 10755
Dugan Production Corp.

Federal Lease NM 12374
Buckhorn Petroleum Co. 33.3%
Box 4928, TA
Denver, CO 80202

Elf-Aquitaine Oil & Gas 37.5%
Allied Bank Plaza
1000 Louisiana, Suite 3800
Houston, TX 77002

Dome Petroleum Co. 29.2%
1625 Broadway, Suite 2900
Denver, CO 80202

Federal Lease SF 078860
Reynolds Mining Corp. 50%
Box 9911
Corpus Christi, TX 78408

Conoco, Inc. 50%
Box 460
Hobbs, NM 88240

Figure No. 2

DUGAN PRODUCTION CORP.
Muddy Mudda #1
N/2 Sec. 21, T24N, R9W, NMPM
San Juan County, New Mexico

dugan production corp.

September 26, 1984

Elf Aquitaine Oil & Gas
Allied Bank Plaza
1000 Louisiana, Suite 3800
Houston, TX 77002

Re: Request for Administrative Authorization
Downhole Commingling of Bisti Lower Gallup
and Basin Dakota Pools
Dugan Production Corp.'s Muddy Mudda #1 Well
Unit D, Section 21, T24N, R9W, NMPM
San Juan Co., New Mexico

Gentlemen:

The purpose of this letter is to inform you of Dugan Production Corp.'s application to the New Mexico Oil Conservation Division requesting permission to downhole commingle production from the Gallup and Dakota formations in the captioned well.

We are making this application because of the marginal productivity indicated in our recent completion efforts of the Muddy Mudda #1. Thus far, no significant production has occurred and we expect the well to make approximately 8 BOPD and 135 MCFD total from the commingled horizons. We expect to rod pump the well and believe this well will always be of marginal productivity.

The proposed commingling is much the same as the downhole commingling of the Gallup and Dakota formations in seven other wells in the vicinity. Enclosed please find a sketch depicting the offset leases and a map showing the location of the Muddy Mudda #1 Well and the existing Gallup-Dakota commingled wells.

If you have any questions regarding this matter, feel free to contact me or John Roe at the address listed below.

Sincerely,

Steve Folk

Steve Folk
Geologist

SF:nw

enc.

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87499 • PHONE: (505) 325-1821

dugan production corp.

September 26, 1984

Reynolds Mining Corp.
Box 9911
Corpus Christi, TX 78408

Re: Request for Administrative Authorization
Downhole Commingling of Bisti Lower Gallup
and Basin Dakota Pools
Dugan Production Corp.'s Muddy Mudda #1 Well
Unit D, Section 21, T24N, R9W, NMPM
San Juan Co., New Mexico

Gentlemen:

The purpose of this letter is to inform you of Dugan Production Corp.'s application to the New Mexico Oil Conservation Division requesting permission to downhole commingle production from the Gallup and Dakota formations in the captioned well.

We are making this application because of the marginal productivity indicated in our recent completion efforts of the Muddy Mudda #1. Thus far, no significant production has occurred and we expect the well to make approximately 8 BOPD and 135 MCFD total from the commingled horizons. We expect to rod pump the well and believe this well will always be of marginal productivity.

The proposed commingling is much the same as the downhole commingling of the Gallup and Dakota formations in seven other wells in the vicinity. Enclosed please find a sketch depicting the offset leases and a map showing the location of the Muddy Mudda #1 Well and the existing Gallup-Dakota commingled wells.

If you have any questions regarding this matter, feel free to contact me or John Roe at the address listed below.

Sincerely,

Steve Folk

Steve Folk
Geologist

SF:nw

enc.

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87499 • PHONE: (505) 325-1821

dugan production corp.

September 26, 1984

Conoco Inc.
Box 460
Hobbs, NM 88240

Re: Request for Administrative Authorization
Downhole Commingling of Bisti Lower Gallup
and Basin Dakota Pools
Dugan Production Corp.'s Muddy Mudda #1 Well
Unit D, Section 21, T24N, R9W, NMPM
San Juan Co., New Mexico

Gentlemen:

The purpose of this letter is to inform you of Dugan Production Corp.'s application to the New Mexico Oil Conservation Division requesting permission to downhole commingle production from the Gallup and Dakota formations in the captioned well.

We are making this application because of the marginal productivity indicated in our recent completion efforts of the Muddy Mudda #1. Thus far, no significant production has occurred and we expect the well to make approximately 8 BOPD and 135 MCFD total from the commingled horizons. We expect to rod pump the well and believe this well will always be of marginal productivity.

The proposed commingling is much the same as the downhole commingling of the Gallup and Dakota formations in seven other wells in the vicinity. Enclosed please find a sketch depicting the offset leases and a map showing the location of the Muddy Mudda #1 Well and the existing Gallup-Dakota commingled wells.

If you have any questions regarding this matter, feel free to contact me or John Roe at the address listed below.

Sincerely,

Steve Folk

Steve Folk
Geologist

SF:nw

enc.

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87499 • PHONE: (505) 325-1821

dugan production corp.

September 26, 1984

Holly Energy, Inc.
717 N. Harwood St., Suite 2600
Dallas, TX 75201

Re: Request for Administrative Authorization
Downhole Commingling of Bisti Lower Gallup
and Basin Dakota Pools
Dugan Production Corp.'s Muddy Mudda #1 Well
Unit D, Section 21, T24N, R9W, NMPM
San Juan Co., New Mexico

Gentlemen:

The purpose of this letter is to inform you of Dugan Production Corp.'s application to the New Mexico Oil Conservation Division requesting permission to downhole commingle production from the Gallup and Dakota formations in the captioned well.

We are making this application because of the marginal productivity indicated in our recent completion efforts of the Muddy Mudda #1. Thus far, no significant production has occurred and we expect the well to make approximately 8 BOPD and 135 MCFD total from the commingled horizons. We expect to rod pump the well and believe this well will always be of marginal productivity.

The proposed commingling is much the same as the downhole commingling of the Gallup and Dakota formations in seven other wells in the vicinity. Enclosed please find a sketch depicting the offset leases and a map showing the location of the Muddy Mudda #1 Well and the existing Gallup-Dakota commingled wells.

If you have any questions regarding this matter, feel free to contact me or John Roe at the address listed below.

Sincerely,

Steve Folk

Steve Folk
Geologist

SF:nw

enc.

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87499 • PHONE: (505) 325-1821

dugan production corp.

September 26, 1984

Read & Stevens
Box 1518
Roswell, NM 88201

Re: Request for Administrative Authorization
Downhole Commingling of Bisti Lower Gallup
and Basin Dakota Pools
Dugan Production Corp.'s Muddy Mudda #1 Well
Unit D, Section 21, T24N, R9W, NMPM
San Juan Co., New Mexico

Gentlemen:

The purpose of this letter is to inform you of Dugan Production Corp.'s application to the New Mexico Oil Conservation Division requesting permission to downhole commingle production from the Gallup and Dakota formations in the captioned well.

We are making this application because of the marginal productivity indicated in our recent completion efforts of the Muddy Mudda #1. Thus far, no significant production has occurred and we expect the well to make approximately 8 BOPD and 135 MCFD total from the commingled horizons. We expect to rod pump the well and believe this well will always be of marginal productivity.

The proposed commingling is much the same as the downhole commingling of the Gallup and Dakota formations in seven other wells in the vicinity. Enclosed please find a sketch depicting the offset leases and a map showing the location of the Muddy Mudda #1 Well and the existing Gallup-Dakota commingled wells.

If you have any questions regarding this matter, feel free to contact me or John Roe at the address listed below.

Sincerely,

Steve Folk

Steve Folk
Geologist

SF:nw

enc.

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87499 • PHONE: (505) 325-1821

dugan production corp.

September 26, 1984

Valex Petroleum, Inc.
1580 Lincoln St., Suite 730
Denver, CO 80203

Re: Request for Administrative Authorization
Downhole Commingling of Bisti Lower Gallup
and Basin Dakota Pools
Dugan Production Corp.'s Muddy Mudda #1 Well
Unit D, Section 21, T24N, R9W, NMPM
San Juan Co., New Mexico

Gentlemen:

The purpose of this letter is to inform you of Dugan Production Corp.'s application to the New Mexico Oil Conservation Division requesting permission to downhole commingle production from the Gallup and Dakota formations in the captioned well.

We are making this application because of the marginal productivity indicated in our recent completion efforts of the Muddy Mudda #1. Thus far, no significant production has occurred and we expect the well to make approximately 8 BOPD and 135 MCFD total from the commingled horizons. We expect to rod pump the well and believe this well will always be of marginal productivity.

The proposed commingling is much the same as the downhole commingling of the Gallup and Dakota formations in seven other wells in the vicinity. Enclosed please find a sketch depicting the offset leases and a map showing the location of the Muddy Mudda #1 Well and the existing Gallup-Dakota commingled wells.

If you have any questions regarding this matter, feel free to contact me or John Roe at the address listed below.

Sincerely,

Steve Folk

Steve Folk
Geologist

SF:nw

enc.

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87499 • PHONE: (505) 325-1821

dugan production corp.

September 26, 1984

Amax Petroleum Corp.
P.O. Box 42806
Houston, TX 77042

Re: Request for Administrative Authorization
Downhole Commingling of Bisti Lower Gallup
and Basin Dakota Pools
Dugan Production Corp.'s Muddy Mudda #1 Well
Unit D, Section 21, T24N, R9W, NMPM
San Juan Co., New Mexico

Gentlemen:

The purpose of this letter is to inform you of Dugan Production Corp.'s application to the New Mexico Oil Conservation Division requesting permission to downhole commingle production from the Gallup and Dakota formations in the captioned well.

We are making this application because of the marginal productivity indicated in our recent completion efforts of the Muddy Mudda #1. Thus far, no significant production has occurred and we expect the well to make approximately 8 BOPD and 135 MCFD total from the commingled horizons. We expect to rod pump the well and believe this well will always be of marginal productivity.

The proposed commingling is much the same as the downhole commingling of the Gallup and Dakota formations in seven other wells in the vicinity. Enclosed please find a sketch depicting the offset leases and a map showing the location of the Muddy Mudda #1 Well and the existing Gallup-Dakota commingled wells.

If you have any questions regarding this matter, feel free to contact me or John Roe at the address listed below.

Sincerely,

Steve Folk

Steve Folk
Geologist

SF:nw

enc.

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87499 • PHONE: (505) 325-1821

dugan production corp.

September 26, 1984

Buckhorn Petroleum Co.
Box 4928, TA
Denver, CO 80202

Re: Request for Administrative Authorization
Downhole Commingling of Bisti Lower Gallup
and Basin Dakota Pools
Dugan Production Corp.'s Muddy Mudda #1 Well
Unit D, Section 21, T24N, R9W, NMPM
San Juan Co., New Mexico

Gentlemen:

The purpose of this letter is to inform you of Dugan Production Corp.'s application to the New Mexico Oil Conservation Division requesting permission to downhole commingle production from the Gallup and Dakota formations in the captioned well.

We are making this application because of the marginal productivity indicated in our recent completion efforts of the Muddy Mudda #1. Thus far, no significant production has occurred and we expect the well to make approximately 8 BOPD and 135 MCFD total from the commingled horizons. We expect to rod pump the well and believe this well will always be of marginal productivity.

The proposed commingling is much the same as the downhole commingling of the Gallup and Dakota formations in seven other wells in the vicinity. Enclosed please find a sketch depicting the offset leases and a map showing the location of the Muddy Mudda #1 Well and the existing Gallup-Dakota commingled wells.

If you have any questions regarding this matter, feel free to contact me or John Roe at the address listed below.

Sincerely,

Steve Folk

Steve Folk
Geologist

SF:nw

enc.

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87499 • PHONE: (505) 325-1821

dugan production corp.

September 26, 1984

Dome Petroleum Co.
1625 Broadway, Suite 2900
Denver, CO 80202

Re: Request for Administrative Authorization
Downhole Commingling of Bisti Lower Gallup
and Basin Dakota Pools
Dugan Production Corp.'s Muddy Mudda #1 Well
Unit D, Section 21, T24N, R9W, NMPM
San Juan Co., New Mexico

Gentlemen:

The purpose of this letter is to inform you of Dugan Production Corp.'s application to the New Mexico Oil Conservation Division requesting permission to downhole commingle production from the Gallup and Dakota formations in the captioned well.

We are making this application because of the marginal productivity indicated in our recent completion efforts of the Muddy Mudda #1. Thus far, no significant production has occurred and we expect the well to make approximately 8 BOPD and 135 MCFD total from the commingled horizons. We expect to rod pump the well and believe this well will always be of marginal productivity.

The proposed commingling is much the same as the downhole commingling of the Gallup and Dakota formations in seven other wells in the vicinity. Enclosed please find a sketch depicting the offset leases and a map showing the location of the Muddy Mudda #1 Well and the existing Gallup-Dakota commingled wells.

If you have any questions regarding this matter, feel free to contact me or John Roe at the address listed below.

Sincerely,

Steve Folk

Steve Folk
Geologist

SF:nw

enc.

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87499 • PHONE: (505) 325-1821

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE 10-2-84

RE: Proposed MC _____
Proposed DHC X
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

RECEIVED
OCT - 4 1984
OIL CONSERVATION DIVISION
SANTA FE

Gentlemen:

I have examined the application dated 9-28-84

for the Dugan Production Corp. Muddy Mudda #1 D-21-24N-9W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve:

Yours truly,

Ernie Busch