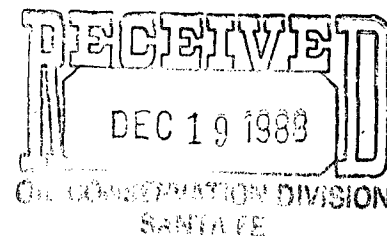




dugan production corp.

December 16, 1988



New Mexico Oil Conservation Division
310 Old Santa Fe Trail, Room 206
Santa Fe, NM 87503

Attention: William LeMay

Re: Request for administrative approval to downhole commingle
Basin Dakota Gas Pool and
Angel Peak Gallup Associated Oil Pool
Dugan Production Corp's
Mc Adams No. 4
Federal Lease No. SF-081087
Unit N, Section 34, T27N, R10W, NMPM
San Juan County, New Mexico

Dear Mr. LeMay:

We are writing to request administrative approval for the downhole commingling of production from the Basin Dakota Gas Pool and the Angel Peak Gallup Associated Oil Pool in the subject well.

The McAdams No.4 well was drilled in July of 1958 and dually completed in the Angel Peak Gallup Associated Oil Pool and the Basin Dakota Gas Pool, which was permitted by Order DC #654. The Gallup formation was perforated in the 6236'-6248.5' interval and stimulated with 700 bbls of oil with 17,000 lbs of sand. The Dakota formation was perforated in the intervals of 6914'-6950' and 6974'-6994' and stimulated with 740 bbls of oil with 25,000 lbs. of sand (see Attachment No. 1).

The Basin Dakota Formation in the area is generally depleted and currently is only capable of marginal production. As can be seen by Table No. 1, the average production of the offsets for 1987 was 55 MCFD. The highest averages are those of infill wells which do not have the long production histories of the original wells. The McAdams No. 2 which is located in Unit P Section 34, T27N, R10W and is on the same lease as the subject well, has a life-time Basin Dakota cumulative as of January 1, 1988 of 1,161,265 MCF of gas and 15,312 bbls of condensate. The McAdams No. 3, located in Unit H, Section 34, T27N, R10W which is also on the same lease as the McAdams No. 4, has a life-time Basin Dakota cumulative as of January 1, 1988 of

Letter to NMOCD

Re: DHC DPC's McAdams #4

December 16, 1988

Page 2

744,909 MCF of gas and 9281 bbls of condensate. Cumulative production for the Basin Dakota zone in the McAdams No. 4 as of October 1, 1988 is 1,030,928 MCF of gas, 10868 bbls of condensate and 1093 bbls of water. The 1988 production for the McAdams No. 4 has averaged 46.9 MCF of gas per day with no condensate produced and negligible water production. The Dakota zone is produced into a high pressure system operated by El Paso Natural Gas (EPNG).

The Gallup zone is currently also only capable of marginal production and has been shut-in since 1971. The cumulative production for the McAdams No. 4 from the Angel Peak Gallup Associated Oil Pool as of August 1, 1988 is 25219 bbls of oil, 3,273,449 MCF of gas and 422 bbls of water. The Gallup was connected to a low pressure system operated by EPNG. The Gallup zone was disconnected by EPNG on April 11, 1973 due to non-productivity.

The ownership of the two pools involved is common in both the working interest and the royalty interest since lease No. SF-081087 is held and is comprised of all of Section 34, T27N, R10W. The production unit for the Gallup is 320 acres which covers the W/2 Section 34, T27N, R10W and is a joint unit with the McAdams No. 1 (F, 34, T27N, R10W) which is completed only in the Gallup. The Dakota production unit is also the W/2 Section 34, T27N, R10W.

A northwest offset, the McAdams No. 3 (H, 34-T27N-R10W) was downhole commingled in 1976 by Order DHC #5313, in the Angel Peak Gallup Associated Oil Pool and the Basin Dakota Gas Pool. An east offset, the McAdams No. 2 (P, 34-T27N-R10W) was also downhole commingled in the Angel Peak Gallup and Basin Dakota zones by Order R-6824 on November 24, 1981. Commingled production from these two wells appears to be compatible and to date there has been no evidence that the mixing of the fluids have resulted in the formation of precipitates which would be damaging to either zone. It is a common practice to downhole commingle production from the Gallup and Dakota formations and we are not aware of any fluid sensitivity of either formation in the Angel Peak Gallup Associated Oil Pool or the Basin Dakota Gas Pool in this area. Both formations are routinely stimulated using water so we would not expect either zone to be subject to damage from water or other produced liquids.

The McAdams No. 3 which has been commingled since 1976 has allocation factors as follows:

	<u>Oil</u>	<u>Gas</u>
Gallup	80%	20%
Dakota	20%	80%

Letter to NMOCD

Re: DHC DPC's McAdams #4

December 16, 1988

Page 3

The McAdams No. 2 which has been commingled since 1981 also has the following allocation factors:

	<u>Oil</u>	<u>Gas</u>
Gallup	80%	20%
Dakota	20%	80%

The total value of the crude produced should not be reduced by commingling the Gallup and the Dakota zones in the McAdams No. 4. Nor should the commingling jeopardize the efficiency of present or future secondary recovery operations in either of the zones to be commingled. The proposed commingling is necessary to permit the Basin Dakota zone to continue to be produced which will not otherwise be economically producible. By using the gas from the Dakota to assist in lifting fluids from the Gallup, we are optimistic that the Gallup will be able to again produce. With the low volumes of gas currently being produced and considering the current gas market, work to repair a recently developed tubing or packer leak will add an economical burden which may force the premature abandonment of both zones in the well before recoverable reserves are completely depleted and will result in the waste of hydrocarbons.

We do not believe that cross-flow will occur from commingling these zones. The bottomhole pressure has been calculated to be 241 psia in the Dakota and 361 psia in the Gallup. Because the Dakota has produced continually since the well was completed, we used its current shut-in wellhead pressure. To calculate the Gallup reservoir pressure, we used a shut-in wellhead pressure taken during the packer leakage test in June 1971 which was approximately the last date of production from the Gallup. We feel that these pressures are indicative of the maximum bottomhole pressures which could currently exist. It should be noted that the bottomhole pressures in both zones are very close to abandonment pressures.

Attached are copies of the letter sent to all offset operators and the Bureau of Land Management notifying them of this proposed commingling. The BLM was notified because of the Federal acreage involved. Attachment No. 2 is a listing of all offsetting leases and operators. Attachment No. 3 is a plat of the area showing the acreage dedicated to the well and the offsetting leases.

Letter to NMOCD

Re: DHC DPC's McAdams #4

December 16, 1988

Page 4

In summary, Dugan Production is requesting administrative approval for the downhole commingling of production from the Basin Dakota Gas Pool and the Angel Peak Gallup Associated Oil Pool in the McAdams No. 4 well located in Section 34, T27N, R10W, San Juan County, New Mexico.

Should you have any questions concerning this request, please contact me or John Roe of this office.

Sincerely,

A handwritten signature in cursive script, reading "Barbara L. Williams", followed by a long horizontal flourish.

Barbara L. Williams
Engineer

BW\dhc\mcadams.4

APPLICATION FOR DOWNHOLE COMMINGLING

Attachment No. 1

McAdams #4
990' FSL & 1650' FWL
Sec. 34, T27N, R10W
San Juan County, NM

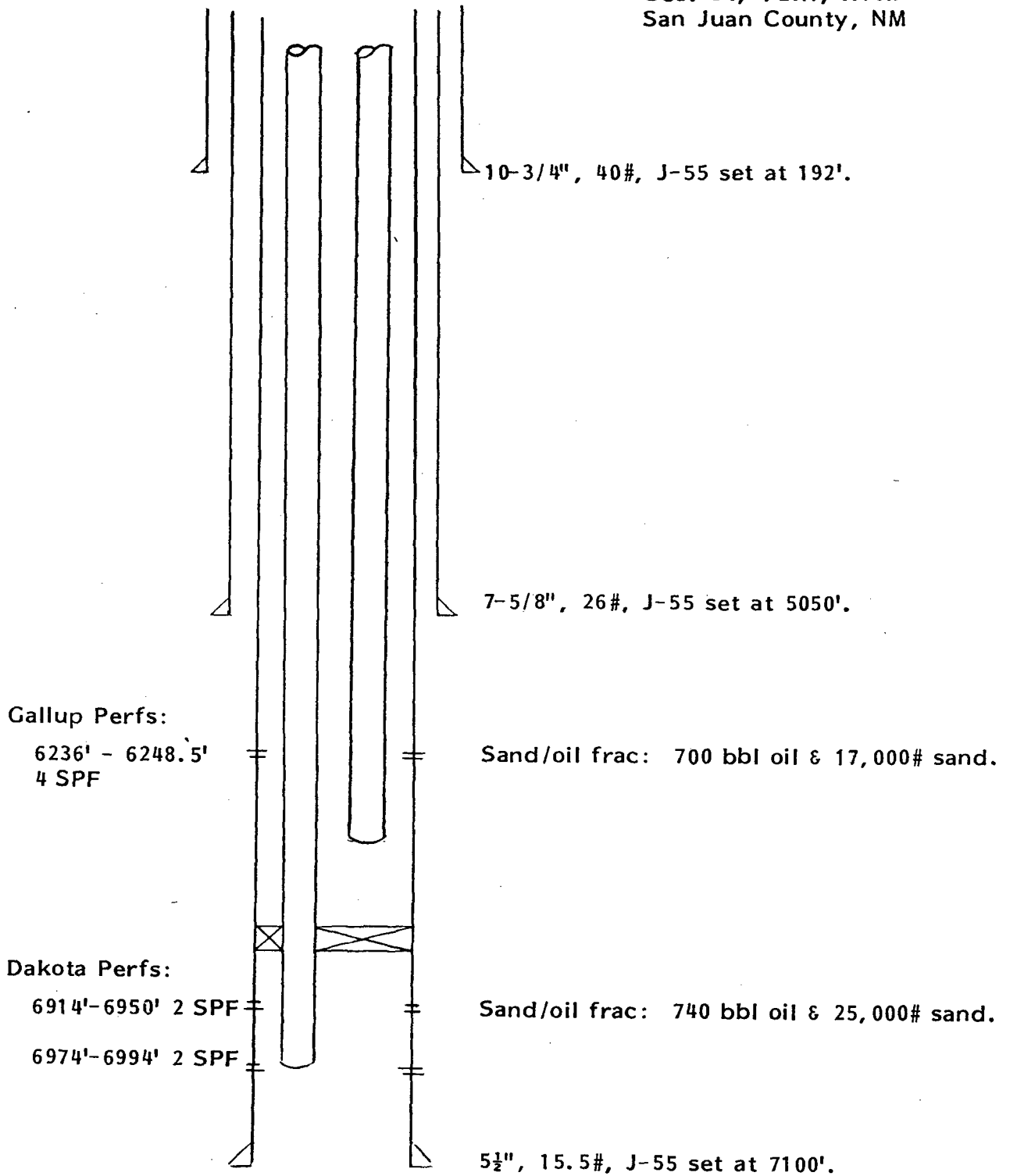


TABLE NO. 1
Dowrhole Coring/ing Application
Immediate Offsets

BASIN DAKOTA COMPLETION										ANGEL PEAK GALLUP COMPLETION					
Company & Lease	Location	Cumulative 1-1-88		1987 Production					Cumulative 1-1-88		1987 Production				
		Gas - MCF	Oil-Bbl	MCF-Gas	Oil-Bbl	MCFD	1987 Avg. BOPD	Gas-MCF	Oil-Bbls	Gas-MCF	Oil-Bbls	MCFD/BOPD			
AMOCO															
Jack Frost B															
1	P-27-27-10	1,401,311	19,036	3,821	7	10	TSTM	86,312	3,224	Last Production 6/1973					
1E	M-27-27-10	407,637	7,583	37,593	510	103	1.4	88,573	1,129	11,858	148	32/0.4			
MERIDIAN															
Huerfano Unit															
103	C-3-26-10	521,990	8,386	3,081	0	8	----	1,990,496	17,779	2,764	0	7.6/0			
106	J-33-27-10	1,223,745	29,503	15,258	702	42	0.6	6,994,800	47,092	157,717	1283	432/3.5			
106E	A-33-27-10	83,804	5,004	29,190	592	80	1.6	Not Completed in Gallup							
110E	H-3-26-10	137,834	2,299	48,424	467	133	1.3	Not Completed in Gallup							
DUCAN PRODUCTION															
McAdams															
1	F-34-27-10	Not Completed in Basin Dakota						2,638,968	25,605	56,746	259	155/0.7			
2	P-34-27-10	1,161,265	15,312	15,145	108	41	0.3	4,467,274	30,997	Last Production 5/1985					
3	H-34-27-10	744,709	9,281	7,279	18	20	TSTM	1,150,873	55,507	1,802	73	4.9/0.2			

Attachment No. 2

DOWNHOLE COMMINGLING APPLICATION

OFFSET OPERATORS AND LEASES

McADAMS No. 4

SW/4 Section 34, T27N, R10W
San Juan County, New Mexico

T-27-N, R-10W

Sec. 27: All
Amoco Production Company
SF-077951-A

Sec. 26: W/2
Amoco Production Company
SF-077951

Sec. 35: NW/4, N/2 SW/4
El Paso Natural Gas Company
SF-077950

Sec. 35: S/2 SW/4
El Paso Natural Gas Co.
SF-079917

Sec. 34: W/2
Dugan Production Corp.
SF-081087

Sec. 34: E/2 NE/4
Dugan Production Corp.
SF-081087

Sec. 28: All
Amoco Production Co.
SF-077941-A

Sec. 33: NW/4
El Paso Natural Gas Co.
SF-078233

Sec. 33: NE/4
El Paso Natural Gas Co.
SF-077950

Sec. 33: S/2 SE/4
El Paso Natural Gas Co.
SF-078354

Sec. 33: SW/4 & N/2 SE/4
El Paso Natural Gas Co.
NM-02516

T-26-N, R-10-W

Sec. 3: E/2
El Paso Natural Gas Co.
SF-078267-A

Sec. 3: W/2
El Paso Natural Gas Co.
SF-078267

Sec. 2: NW/4
El Paso Natural Gas Co.
E-921-7, B-8801-29, B-11356-18

Sec. 4: N/2
El Paso Natural Gas Co.
NM-0396

Sec. 4: S/2
El Paso Natural Gas Co.
NM-01366

Sec. 2: SW/4
El Paso Natural Gas Co.
B-9320, B-10805, B-8801-29

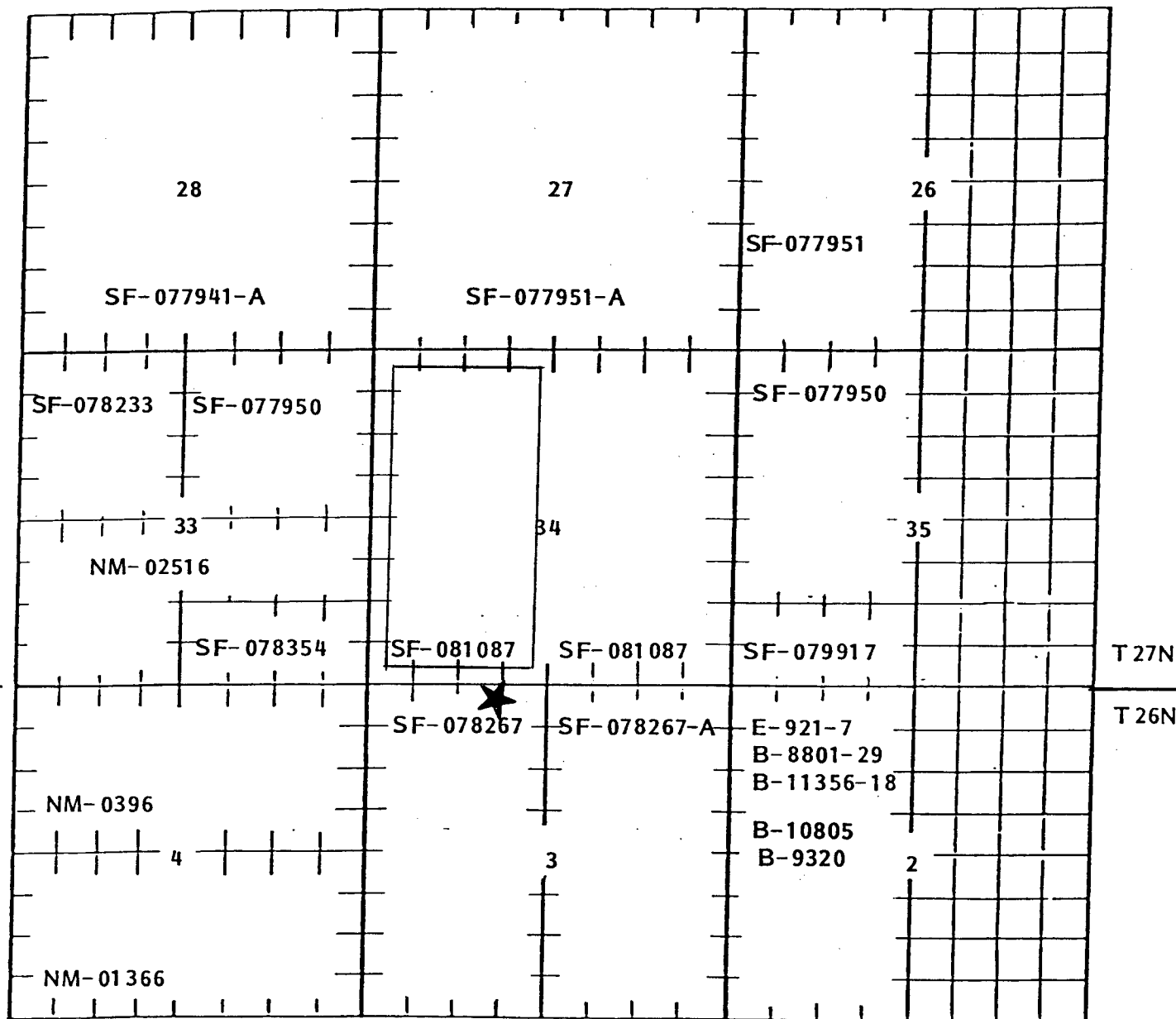
TOWNSHIP 27N, 26N RANGE 10W COUNTY San Juan STATE New Mexico

REMARKS:

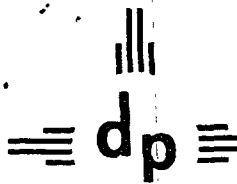
COMPANY

DUGAN PRODUCTION CORP.

R-10-W



Downhole Commingling Application
Dugan Production Corp.
McAdams No. 4
December 16, 1988
Attachment No. 3



dugan production corp.

December 16, 1988

Amoco Production Co.
2325 E. 30th St.
Farmington, NM 87401

Attention: R. J. Broussard

Re: Application for Downhole Commingling
DUGAN PRODUCTION CORP.
McAdams No. 4
SW/4 Sec. 34, T27N, R10W, NMPM
San Juan County, New Mexico

Dear Mr. Broussard,

Enclosed please find the following items with regard to the above referenced matter:

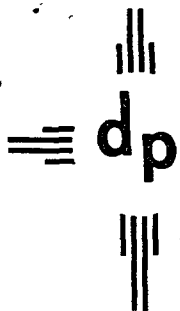
1. Application by Dugan Production Corp. for Downhole Commingling of the McAdams No. 4 well in San Juan County, New Mexico and
2. A copy of the cover letter to William Lemay, New Mexico Oil Conservation Division.

Please contact me should you have any questions.

Sincerely,

Barbara L. Williams
Engineer

BLW/BW/dhc/amoco



dugan production corp.

December 16, 1988

Bureau of Land Management
1235 La Plata Highway
Farmington, NM 87401

Attention: Ron Fellows

Re: Application for Downhole Commingling
DUGAN PRODUCTION CORP.
McAdams No. 4
SW/4 Sec. 34, T27N, R10W, NMPM
San Juan County, New Mexico

Dear Mr. Fellows,

Enclosed please find the following items with regard to the above referenced matter:

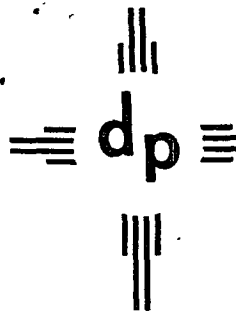
1. Application by Dugan Production Corp. for Downhole Commingling of the McAdams No. 4 well in San Juan County, New Mexico and
2. A copy of the cover letter to William Lemay, New Mexico Oil Conservation Division.

Please contact me should you have any questions.

Sincerely,

Barbara L. Williams
Engineer

BLW/BW/dhc/blm



dugan production corp.

December 16, 1988

Ft. Collins Consolidated Royalties, Inc.
P.O.Box 1363
Cheyenne, WY 82003

Re: Application for Downhole Commingling
DUGAN PRODUCTION CORP.
McAdams No. 4
SW/4 Sec. 34, T27N, R10W, NMPM
San Juan County, New Mexico

Dear sirs,

Enclosed please find the following items with regard to the above referenced matter:

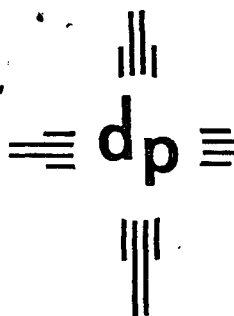
1. Application by Dugan Production Corp. for Downhole Commingling of the McAdams No. 4 well in San Juan County, New Mexico and
2. A copy of the cover letter to William Lemay, New Mexico Oil Conservation Division.

Please contact me should you have any questions.

Sincerely,

Barbara L. Williams
Engineer

BLW/BW/dhc/ft-collin



dugan production corp.

December 16, 1988

El Paso Natural Gas
c/o Meridian Oil
P.O.Box 4289
Farmington, NM 87401

Re: Application for Downhole Commingling
DUGAN PRODUCTION CORP.
McAdams No. 4
SW/4 Sec. 34, T27N, R10W, NMPM
San Juan County, New Mexico

Dear Sirs:

Enclosed please find the following items with regard to the above referenced matter:

1. Application by Dugan Production Corp. for Downhole Commingling of the McAdams No. 4 well in San Juan County, New Mexico and
2. A copy of the cover letter to William Lemay, Director, New Mexico Oil Conservation Division.

Please contact me should you have any questions.

Sincerely,

Barbara L. Williams
Engineer

BLW/BW/dhc/meridian

WELL S I R JAN FEB MAR APRIL MAY JUNE JULY AUG SEPT OCT NOV DEC YR-PROD MP ACCUM

AKAH NEZ DEVONIAN DEV OM TO 5M

W.M. GRUENERTALD AND ASSOC., INC.

NAVAJO

1H2323N2CW OIL

N

587

2203

377

3167

3167

KERR-MCGEE CORPORATION

NAVAJO

1A2323N2CW OIL

N

87

495

504

392

441

55

1974P

13983

ANGELS PEAK GALLUP

GP

6M TO 7M

AMOCO PRODUCTION CO

JACK FROST

1P2727N1CW CIL

F

T

3224

C A MCADAMS

1J2828N1CW OIL

F

T

25907

COMPANY TOTAL OIL

41060

DUGAN PRODUCTION CORPORATION

MCADAMS

1F3427N1CW OIL

F

26

37

48

37

30

33

28

57

42

43

464F

20273

2P3427N1CW OIL

2998

2916

5036

4400

5068

4800

4578

3201

4797

50479

23230

3P3427N1CW OIL

12612

9570

12413

12907

14304

13307

13512

9719

13811

147039

51089

4N3427N1CW OIL

2170

1909

3073

2770

3303

2877

2062

3001

31532

25219

COMPANY TOTAL OIL

119811

EL PASO NATURAL GAS COMPANY

HUERFANO UNIT

60M 426N 9W OIL

UF

UF

G

5458

92F 726N 5W OIL

3204

2783

2408

3901

4974

4539

3837

1453

2814

6552

4413F

9763

99C 226N1CW OIL

4046

76

100

22210

16982

16536

23277

23148

26535

18649

19503

21501

22948

101F1927N1CW OIL

21529

23930

22210

16982

16536

23277

23148

26535

18649

19503

21501

22948

103C 326N1CW OIL

5886

4305

5581

5725

6291

3457

6224

6419

6048

6029

4325

5879

105P2927N1CW OIL

1049

1016

950

647

659

1111

1149

774

714

2944

8992

25535

105P2927N1CW OIL

29003

22545

29243

21266

22775

11367

20683

20601

21597

22564

16666

22873

106J3327N1CW OIL

25779

22891

27370

22411

25314

13372

24194

25864

21903

22454

20441

27887

107E3527N1CW OIL

632

1659

1605

1246

1198

113

100

100

100

101

101

101

108E 126N1CW OIL

14386

16213

15142

11583

11277

14781

15646

16405

9683

15741

14921

15522

109I 226N1CW OIL

8721

10747

6294

5674

4218

8929

8028

12792

8119

10766

10352

11604

113C3327N1CW OIL

25346

20129

26053

24300

26641

13742

24376

24361

24098

23236

16275

23684

16001726N 9W OIL

34250

39388

38717

28447

37411

37616

37858

36893

34724

25118

33365

36404

HUERFANO UNIT

111F2026N 5W OIL

4091

4420

4233

3059

4051

3319

4085

4255

3519

3127

3627

3867

116C1126N1CW OIL

1297

1396

1608

801

853

1222

969

1321

1315

2269

1911

2554

HUERFANO UNIT

1101 326N1CW OIL

53

52

37

50

33

54

49

1692

1061

27

186F

3388

Y151C3526N1CW OIL

1812

1842

1384

1313

1140

2004

1692

1061

27

186F

3510

COMPANY TOTAL OIL

21049

HUSKY OIL COMPANY OF DELAWARE

EVENSEN

3G1927N1CW OIL

F

103

122

162

115

4917

16131

W. R. REAVER

MCADAMS

5A3427N1CW OIL PLUGGED AND ABANDONED 1961

F

3183

BISTI LOWER GALLUP

GP

OM TO 5M

ATLANTIC RICHFIELD COMPANY

BITTONEY NEZ

1G2325N11W OIL

1385

1214

1098

749

1270

1308

13748

KI YAH DE TAH

1E2425N11W OIL

169

166

193

188

104

79

18015

COMPANY TOTAL OIL

19763

BENSICA-MONTIN-GREER DRILLING CORPORATION

SCHWERDTFEGER

1G1724N 5W OIL PLUGGED AND ABANDONED 1969

F

AKAH NEZ DEVIAN	DEV	OM TU 5M												

MM. KUENENWALD AND ASSOC., INC.	N	*****												
NAVAJO														
123232N20W OIL PLUGGING APPROVED	1972													3167

KEHR-MCGEE CORPORATION	N	*****												
NAVAJO														
123232N20W OIL PLUGGING APPROVED	1972	49											49	14032

ALAMO FARMINGTON	FAR	OM TU 5M												

EL PASO NATURAL GAS COMPANY														
RIDDLE														
4M 430N 9W OIL	142	87 F 115	105	96	14	112	79	87	104	106	101	1148F	12106	

AMARILLO GALLUP	GP	5M TO 6M												

DUGAN PRODUCTION CORPORATION														
QUINTH FEDERAL														
1P3328N13W OIL	28	35 F 9	21	27	51	5	14	22	27	21	5	265P	43354	
FULLER												P	3429	
1P3428N13W OIL														
COMPANY TOTAL OIL	28	35 9	21	27	51	5	14	22	27	21	5	265	46783	

ANGELS PEAK GALLUP	GP	6M TO 7M												

AMCO PRODUCTION CO														
JACK FRUST B														
1P2727N10W OIL														
C A MCADAMS B														
1J2827N10W OIL														
2E2827N10W OIL														
COMPANY TOTAL OIL														

DUGAN PRODUCTION CORPORATION														
MCADAMS														
1F3427N10W OIL	42	40	44	43	22	36	42	36	48	42	466F	20739		
GAS	5253	4938	3127	4139	4696	3184	4083	3119	4333	4721	4650	50540		
2P3427N10W OIL	9	9	14	101	98	67	63	83	53	38	38	2919F	24149	
GAS	13973	13747	13502	9964	13032	12639	9701	10033	8571	11583	12290	12460	141500	
3H3427N10W OIL	55	20	64	98	103	90	76	129	92	116	112	1049F	52138	
GAS	2664	1000	2144	1591	2311	2777	2043	2111	1858	2408	2849	2531	25834	
4N3427N10W OIL														
GAS		1998											1998	
COMPANY TOTAL OIL	106	127	245	222	242	223	193	181	269	217	217	192	2434	
GAS	23893	19686	19937	14682	19482	20112	14925	16233	13297	16324	19660	19641	219872	

EL PASO NATURAL GAS COMPANY														
BALLARD														
11D1326N 9W OIL	36	F 47	70	58	37	43	66	440	24			843F	14292	
GAS	54	45	67	56	35	43	499	396	262	309		1766		
HUERFANO UNIT NP														
60M 426N 9W OIL ZONE ABANDONED														
HUERFANO UNIT														
52F 726N 9W OIL	49	24	86	36	14	19	76					334F	10067	
GAS	6657	6855	4794	6286	5743	4784	4799	3948	375	5915	6128	5775	62059	
99C 226N10W OIL	101	101	125	74	74	98	99	122	194	85	87	76	1246F	
GAS	22445	16398	20740	19743	19077	15655	21312	14035	20381	20396	21221	19915	231368	
101F1927N10W OIL	100	100	81	74	98	91	85	85	85	176	174	1050F	22157	
GAS	6140	5772	6175	4632	5820	6301	6879	6350	6362	4562	6144	6104	71241	
103C 326N10W OIL														
GAS	9112	889	59	74	98	64	76	64	76	50	50	510F	17073	
105P2927N10W OIL	101	101	125	74	74	98	99	122	194	85	87	76	1246F	
GAS	22445	16398	20740	19743	19077	15655	21312	14035	20381	20396	21221	19915	231368	
106J3327N10W OIL	101	101	125	74	74	98	99	122	194	85	87	76	1246F	
GAS	22445	16398	20740	19743	19077	15655	21312	14035	20381	20396	21221	19915	231368	
107E3527N10W OIL	101	101	125	74	74	98	99	122	194	85	87	76	1246F	
GAS	22445	16398	20740	19743	19077	15655	21312	14035	20381	20396	21221	19915	231368	
108E 126N10W OIL	85	93	88	70	74	62	54	77	75	76	76	76	906F	
GAS	13004	10811	15418	12666	13579	11359	11809	9775	13386	12748	11407	11687	147651	
109I 226N10W OIL	12883	9347	12211	11783	10088	9843	8547	7967	9449	10896	11736	10607	125157	
GAS	20623	26047	25262	18464	20847	22043	24287	23061	22790	16794	22252	21694	264164	
113C3327N10W OIL	66	22	39	34	26	20	18	58	53	53	68	68	406F	
GAS	179	7236	7488	9765	10489	7914	10481	10348	10351	10386	7686	10891	102925	
1600I126N 9W OIL	36321	36273	26600	34701	34386	25902	33684	32102	24843	33335	33075	32183	363605	
HUERFANO UNIT NP														
111F2026N 9W OIL	4192	43	13	13	3193	36	36	3383	2525	3559	3462	3686	41787	
GAS	2456	2112	2649	2313	2202	1571	1584	1138	1395	1122	1009	1955	21525	
116C1126N10W OIL	680	481	587	627	631	535	606	442	583	594	601	555	6922	
GAS														
HUERFANO UNIT NP														
110I 326N10W OIL	3													
GAS	843	1301	1104	959	888	1092	1149	1189	1184	1217	1405	706	13137	
COMPANY TOTAL OIL	181159	182199	184090	170699	177335	161488	184755	162417	156525	164316	181729	178620	2095032	
GAS														

HUSKY OIL COMPANY OF DELAWARE														
EVENSEN														
3G1927N10W OIL	173	145	113	105	78	63	104	151	194	200	165	90	1581	
GAS	6063	4221	4412	3206	3038	2242	3551	5495	6394	4187	4502	3597	50824	

W. R. WEAVER														
MCADAMS														
543427N10W OIL PLUGGING APPROVED	1961													3193

BISTI LOWER GALLUP	GP	OM TU 5M												

ATLANTIC RICHFIELD COMPANY														
BITTONEY NEZ														
1G2325N11W OIL	767	1146	1261	884	1361	1482	1453	1243	1218			512	11461	
GAS	153	229	232	180	272	294	243	245	243			122	2243	
WAT	77	34	36	27	41	45	44	57	57				474	
KE YAH DE TAH														
1E2425N11W OIL	137	121	115	123	113	42	57	117	112	118	104	64	1218	
GAS	24	33	22	22	21	11	13	34	33	23	24	12	245	
WAT	45	40	23	43	34	13	14	34	30				301	
COMPANY TOTAL OIL	974	1247	1374	1021	1174	1424	1403	1347	1333	121	104	574	12453	
GAS	179	252	274	203	203	74	63	34	27	23	24	14	2518	
WAT	121	74	67	67	74	57	63	34	27				301	

JEVSON-WORTH-GREEN DRILLING CORPORATION														
SCHEFFER														
151774N 9W OIL PLUGGING APPROVED	1960													1454

THE BRITISH AMERICAN OIL PRODUCING COMPANY														
ORBITAL														
542324N13W OIL PLUGGING APPROVED	1966													1934

CLINTON OIL COMPANY														
BRIDGEMAN														
1L 124N10W OIL	563	746	778	619	644	665	1054	920	1009	1223	1009	446	1675P	
GAS	137	344	548	972	1009	1945	979	1136	1244	1119	1261	225	18078	
WAT														
OLD TRADING POST														
1P1026N14W OIL														
3J1026N14W OIL														
COMPANY TOTAL OIL	560	746	778	619	644	665	1054	920	1009	1223	1009	446	1675P	
GAS	137	344	548	972	1009	1945	979	1136	1244	1119	1261	225	18078	
WAT														

DUGAN PRODUCTION CORPORATION														
BEDFORD														
1E1245N11W OIL	138	120	136	140	155	146	126	143	141	144	140	134	1675P	
GAS	405	352	399	429	455	429	261	437	414	423	411	393	4808	
SOUTH HUERFANO														
1M1524N 9W OIL	91	40	235	35	37	27	305	336	3	3	7	7	229F	
GAS	2192	1729	2035	1740	2180	1705	305	336	3	3	7	7	12422	
WAT														

ALLOCATION - MACADAMS #4

OIL

CUMULATIVE DAKOTA - 10,868 Bbls - 30%

CUMULATIVE GALLUP - 25,219 Bbls - 70%

GALLUP OIL PROD AT ABANDONMENT - 0 Bbls

CURRENT DAKOTA OIL PROD - 0 Bbls

Allocation should be Dakota - 30%
Gallup - 70%

GAS

CUMULATIVE DAKOTA - 1,030,928 MCF - 24%

" " GALLUP - 3,273,449 MCF - 76%

GALLUP GAS PROD AT ABANDONMENT - 124 MCF/D - 72%

CURRENT DAKOTA GAS PROD - 47 MCF/D - 28%

AVERAGE - $24\% + 28\% / 2 = 26\%$ - DAKOTA
 $76\% + 72\% / 2 = 74\%$ - GALLUP