

RECEIVED: <u>10/04/2017</u>	REVIEWER: <u>HAM</u>	TYPE: <u>PLC</u>	APP NO: <u>DMAM1727735551</u>
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

98182 → Code For
PLC

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Dugan Production Corp. OGRID Number: 006515
 Well Name: Koch Gathering System API: NA
 Pool: Basin Fruitland Coal Pool Code: _____

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW PLC-488

1) **TYPE OF APPLICATION:** Check those which apply for (A)

A. Location - Spacing Unit - Simultaneous Dedication

☐ NSL

☐ NSP (PROJECT AREA)

☐ NSP (PRORATION UNIT)

☐ SD

B. Check one only for (I) or (II)

(I) Commingling - Storage - Measurement

☐ DHC

☒ CTB

☒ PLC

☐ PC

☐ OLS

☐ OLM

(II) Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX

☐ PMX

☐ SWD

☐ IPI

☐ EOR

☐ PPR

2) **NOTIFICATION REQUIRED TO:** Check those which apply.

A. ☒ Offset operators or lease holders

B. ☒ Royalty; overriding royalty owners, revenue owners

C. ☒ Application requires published notice

D. ☒ Notification and/or concurrent approval by SLO

E. ☒ Notification and/or concurrent approval by BLM

F. ☐ Surface owner

G. ☐ For all of the above, proof of notification or publication is attached, and/or,

H. ☐ No notice required

FOR OCD ONLY

☐ Notice Complete

☐ Application
Content
Complete

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

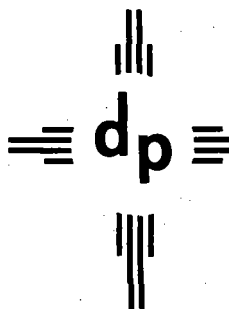
Kevin Smaka
 Print or Type Name

9-29-17
 Date

505-325-1821
 Phone Number

Kevin Smaka
 Signature

Kevin.smaka@duganproduction.com
 e-mail Address



dugan production corp.

RECEIVED OGD

2017 OCT -4 P 3:34

October 2, 2017

Mr. David Catanach, Director
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Mr. Aubrey Dunn, Commissioner
New Mexico State Land Office
P. O. Box 1148
Santa Fe, NM 87504-1148

Rick Fields, Field Manager
Bureau of Land Management
6251 College Blvd., Suite A
Farmington, NM 87402

Re: Application to surface commingle and for the Off-Lease
Measurement/sale of produced natural gas at
Dugan Production's newly formed Koch Gas Gathering System
San Juan County, New Mexico

Dear Mr. Catanach, Mr. Dunn and Mr. Fields,

We are writing to request your administrative approvals to create Dugan Production's Koch Gathering System that requires approval for the surface commingling, off-lease measurement and sale of natural gas produced from 2 existing wells and 52 proposed locations. Gas will be allocated to each well by allocation meters located at each well. NMOCD Form 107-B is attached with this application. A summary presenting the wells and production for each pool is presented on Attachment No. 4. Gas sales for the KGS will occur at Elm Ridge meter 31710, located in the NESW quarter of Section 25, T-25N, R-13W. We are also requesting the NMOCD include a provision in their order that for future additions to the KGS, only the interest owners in the wells being added need to be notified, providing that it is reasonably certain that the proposed additions will not adversely affect the interest owners in the wells already approved for the gathering system. This provision will be very helpful and will significantly reduce the work effort necessary to add future wells to the gathering system.

The KGS was obtained by DPC on July 9, 2015. Upon review of NMOCD records it was determined that Koch Exploration Resources LLC had not acquired the necessary approvals to commingle production or conduct off-lease measurement. Currently there are 2 wells producing and selling natural gas within the KGS. Production currently averages a total of 137 mcf/d for an overall average of 68 mcf/d per well. Well production ranges from 5 to 132 mcf/d. Individual well production for the KGS is presented on Attachment 2 and a summary of pool production is presented on Attachment No. 4.

A description of each attachment has been included for clarity and informational purposes:

Attachment No. 1 presents a map of the KGS with the wells and proposed locations to be added highlighted in blue. In addition, Dugan Production's leases are also presented. The KGS has one central delivery gas sales meter, meter No. 31710, located in the NESW quarter of Section 25, T-25N, R-13W. The meter delivers gas to Elm Ridge Field Services.

Attachment No. 2 presents information for the wells DPC seeks to include in the formation of the Koch Gathering System. At the time of this application there are 2 wells connected and producing gas in the system. One well is considered marginal and the other is considered low volume by definitions found in 43 CFR 3173.

Attachment No. 3 presents the interest ownership for the wells to be added to the KGS. From Attachment No. 3, Dugan Production holds 100% of the working interest in all wells/leases being added and their infill locations. The Bureau of Land Management and State of New Mexico hold interests in the leases and unit being added with this application and will be paid royalty for their interests in the leases and unit. There are no overriding interests in the

unit and leases involved. None of the involved leases pay royalty to any tribe or allottee. Attachment No. 8 presents copies of our interest owner notice efforts. All notice letters have been sent by certified mail with return receipts, and upon receiving the receipts, copies will be forwarded to the NMOCD.

Attachment No. 4 presents a summary of the pools, wells, production and leases for the KGS. The KGS will produce gas from the Fruitland Coal. Production from the KGS averages 68 mcf/d and ranges from 5 to 132 mcf/d per well. Dugan Production's leases for the wells in the Koch Gathering System are summarized on Page 2 of Attachment No. 4. The attachment identifies 5 state leases and 6 federal leases that are included in the KGS. No tribal leases are being added with this application.

Attachment No. 5 presents the allocation procedure being used for the KGS.

Attachment No. 6 presents a comparison of connecting the proposed wells to the existing KGS as opposed to directly connecting each well to the nearest pipeline which will be Elm Ridge's line at the current CDP. This analysis was done to illustrate the benefits connecting wells to the gathering system.

From Attachment No. 6, to connect 2 wells and infill locations to DPC's KGS will have minimal cost and environmental impact since the wells were produced connected to the gathering system prior to DPC acquiring the wells.

If each well and lease, where possible, were to be individually connected directly to DJ Resources for gas sales, the length would require DPC install 12 miles of additional pipe and disturb 102 acres of surface. In addition, since we typically will install the required compressor at the well site, the line between the well and connection to the pipeline will be operating at a higher pressure for direct connection, which will require using 4" steel line as opposed to 4" polypipe which will increase the installation costs from \$15/ft to \$38/ft and will result in the pipeline cost increasing from \$724,110.00 for connecting to a gathering system to \$4,237,864.00 for connecting to DJ Resources. In addition, and probably one of the biggest benefits of operating a gathering system is that we can install central gas compression facilities to serve multiple wells and we typically operate our gathering systems at 20 to 30 psig which provides an optimum surface operating pressure for wells connected to it. For direct connect, it will be necessary to install a compressor on each line in order to deliver gas into DJ Resources pipeline which is currently averaging 325 psig. This will require purchasing and installing 8 compressors to deliver the same gas, which will result in using more produced gas for fuel and producing more noise and exhaust gas. In addition, the cost to make a connection to our gathering system averages about \$5,000/tap and meter run where Enterprise will charge an average of \$131,000 for each pipeline tap and meter run. For our analysis, since the infill wells will have the same interest ownership as the initial spacing unit well, we assumed it will be acceptable to connect the infill well to the initial well and use only one line and compressor to deliver the gas to DJ Resources which will not only reduce the necessary pipeline length, but will reduce the meter run and connection cost for the infill well to \$5,000 and enable the infill well to use the compressor installed for the initial well.

Thus considering all factors of connecting to the existing gathering system versus directly connecting to Enterprise pipeline, the total costs presented in attachment 6 are summarized as follows:

<u>Gathering System</u>	<u>Connect to Gathering System</u>	<u>Connect to DJ Resources</u>	<u>Additional Cost for Direct Connections</u>
KGS	<u>\$ 995,791.00</u>	<u>\$ 5,539,132.00</u>	<u>\$ 4,543,341.00</u>

Considering that many of the wells to be added to the KGS are expected be marginal or low volume producers, it will be very important that we receive approval to use the existing gathering system as opposed to directly connecting each well to the pipeline company. Also considering that these wells are in an area that has significant archaeological, cultural, and paleontology presence, plus is in close proximity to two wilderness areas, and is within the threatened and endangered Brack's Cactus and Aztec Gila Habitat, it is important to minimize the surface disturbance and installation of necessary compression equipment.

Attachment No. 7 presents a facility diagram of compression, salt water disposal and gathering system facilities. These facilities have not been constructed at this time. As the unit is developed these facilities will be constructed to maximize our ability to develop the sunflower unit and produce the minerals in this area.

Attachment No. 8 presents Dugan Productions efforts to contact interest owners.

In summary, Dugan Production is requesting approvals to:

1. Create the Koch Gathering System.
2. Add 2 existing wells plus 52 future wells to the Koch Gathering System.
3. Authorize the surface commingling of produced gas and produced water.
4. Authorize the off-lease measurement of gas.
5. Authorize the beneficial use of off-lease fuel.

It is anticipated that a majority of the wells on the gathering system will be considered to be low volume producers (200 mcf/d or less) many of which will be marginally economic to operate. Dugan Production has made a substantial investment in the acquisition and development of the Koch Gathering System and is optimistic that we will be able to aggressively develop our substantial leasehold interest.

Should you need additional information or have questions regarding this application, please feel free to contact me at the letterhead address.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Smaka", written in a cursive style.

Kevin Smaka
Production Engineer

cc: NMOCD – Aztec; All Working Interest Owners

District I
1625 N. French Drive, Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St Francis Dr, Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107-B
Revised August 1, 2011

OIL CONSERVATION DIVISION
1220 S. St Francis Drive
Santa Fe, New Mexico 87505

Submit the original
application to the Santa Fe
office with one copy to the
appropriate District Office.

APPLICATION FOR SURFACE COMMINGLING (DIVERSE OWNERSHIP)

OPERATOR NAME: Dugan Production Corp.

OPERATOR ADDRESS: 709 E. Murray Dr. Farmington, NM, 87401

APPLICATION TYPE:

☐ Pool Commingling ☒ Lease Commingling ☐ Pool and Lease Commingling ☐ Off-Lease Storage and Measurement (Only if not Surface Commingled)

LEASE TYPE: ☐ Fee ☒ State ☒ Federal

Is this an Amendment to existing Order? ☐ Yes ☐ No If "Yes", please include the appropriate Order No. _____

Have the Bureau of Land Management (BLM) and State Land office (SLO) been notified in writing of the proposed commingling

☐ Yes ☐ No

(A) POOL COMMINGLING

Please attach sheets with the following information

(1) Pool Names and Codes	Gravities / BTU of Non-Commingled Production	Calculated Gravities / BTU of Commingled Production		Calculated Value of Commingled Production	Volumes

(2) Are any wells producing at top allowables? ☐ Yes ☐ No

(3) Has all interest owners been notified by certified mail of the proposed commingling? ☐ Yes ☐ No.

(4) Measurement type: ☐ Metering ☐ Other (Specify)

(5) Will commingling decrease the value of production? ☐ Yes ☐ No If "yes", describe why commingling should be approved

(B) LEASE COMMINGLING

Please attach sheets with the following information

(1) Pool Name and Code. See attachment #4

(2) Is all production from same source of supply? ☐ Yes ☐ No

(3) Has all interest owners been notified by certified mail of the proposed commingling? ☐ Yes ☐ No

(4) Measurement type: ☐ Metering ☐ Other (Specify)

(C) POOL and LEASE COMMINGLING

Please attach sheets with the following information

(1) Complete Sections A and E.

(D) OFF-LEASE STORAGE and MEASUREMENT

Please attached sheets with the following information

(1) Is all production from same source of supply? ☐ Yes ☐ No

(2) Include proof of notice to all interest owners.

(E) ADDITIONAL INFORMATION (for all application types)

Please attach sheets with the following information

(1) A schematic diagram of facility, including legal location.

(2) A plat with lease boundaries showing all well and facility locations. Include lease numbers if Federal or State lands are involved.

(3) Lease Names, Lease and Well Numbers, and API Numbers.

See attachments #1, 2, 4 & 7.

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

SIGNATURE:  TITLE: Production Engineer DATE: 9/29/17

TYPE OR PRINT NAME: Kevin Smaka TELEPHONE NO.: 505-325-1821

E-MAIL ADDRESS: kevin.smaka@duganproduction.com

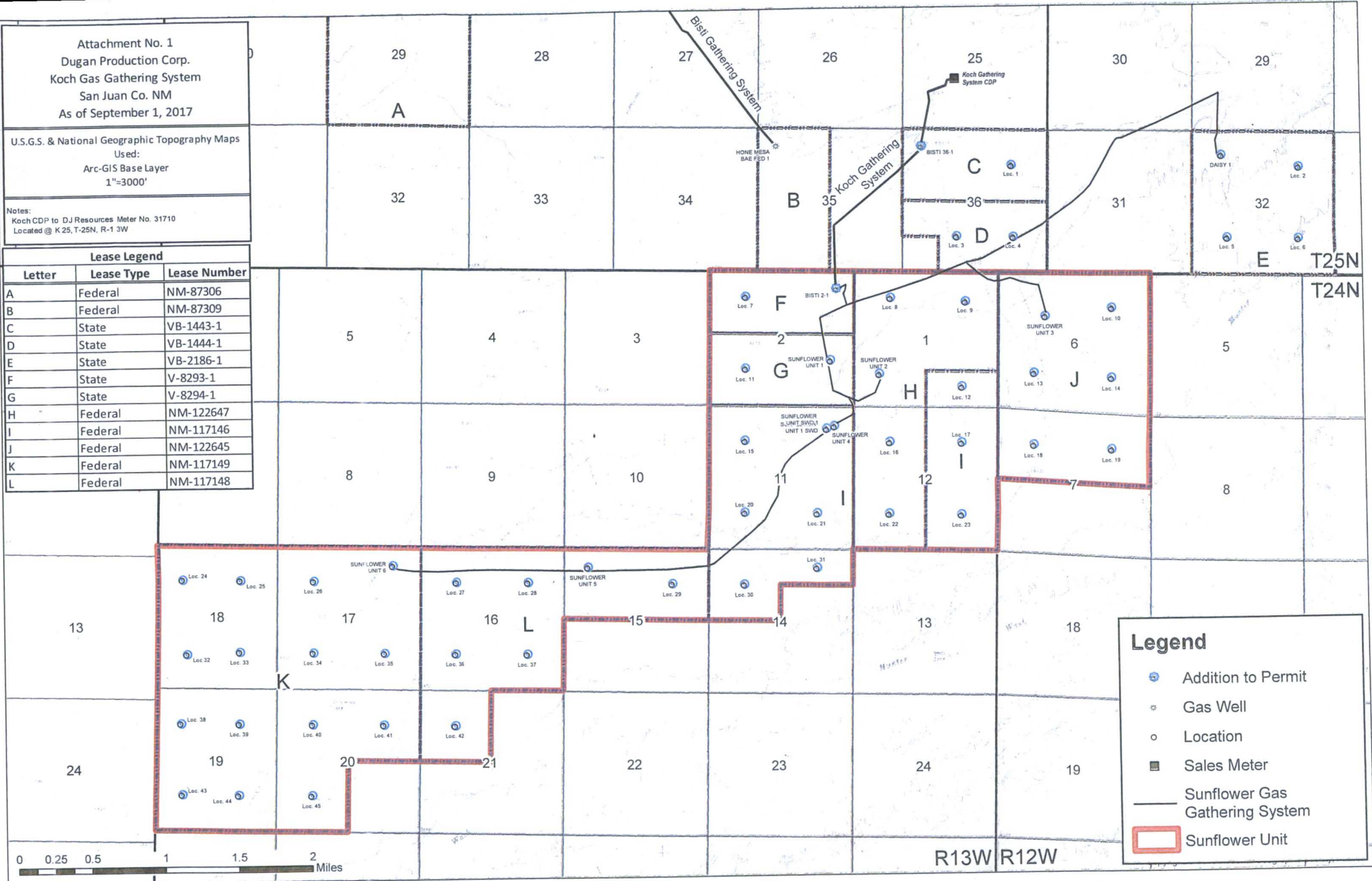
Attachment No. 1
Dugan Production Corp.
Koch Gas Gathering System
San Juan Co. NM
As of September 1, 2017

U.S.G.S. & National Geographic Topography Maps
Used:
Arc-GIS Base Layer
1"=3000'

Notes:
Koch CDP to DJ Resources Meter No. 31710
Located @ K 25, T-25N, R-1 3W

Lease Legend

Letter	Lease Type	Lease Number
A	Federal	NM-87306
B	Federal	NM-87309
C	State	VB-1443-1
D	State	VB-1444-1
E	State	VB-2186-1
F	State	V-8293-1
G	State	V-8294-1
H	Federal	NM-122647
I	Federal	NM-117146
J	Federal	NM-122645
K	Federal	NM-117149
L	Federal	NM-117148



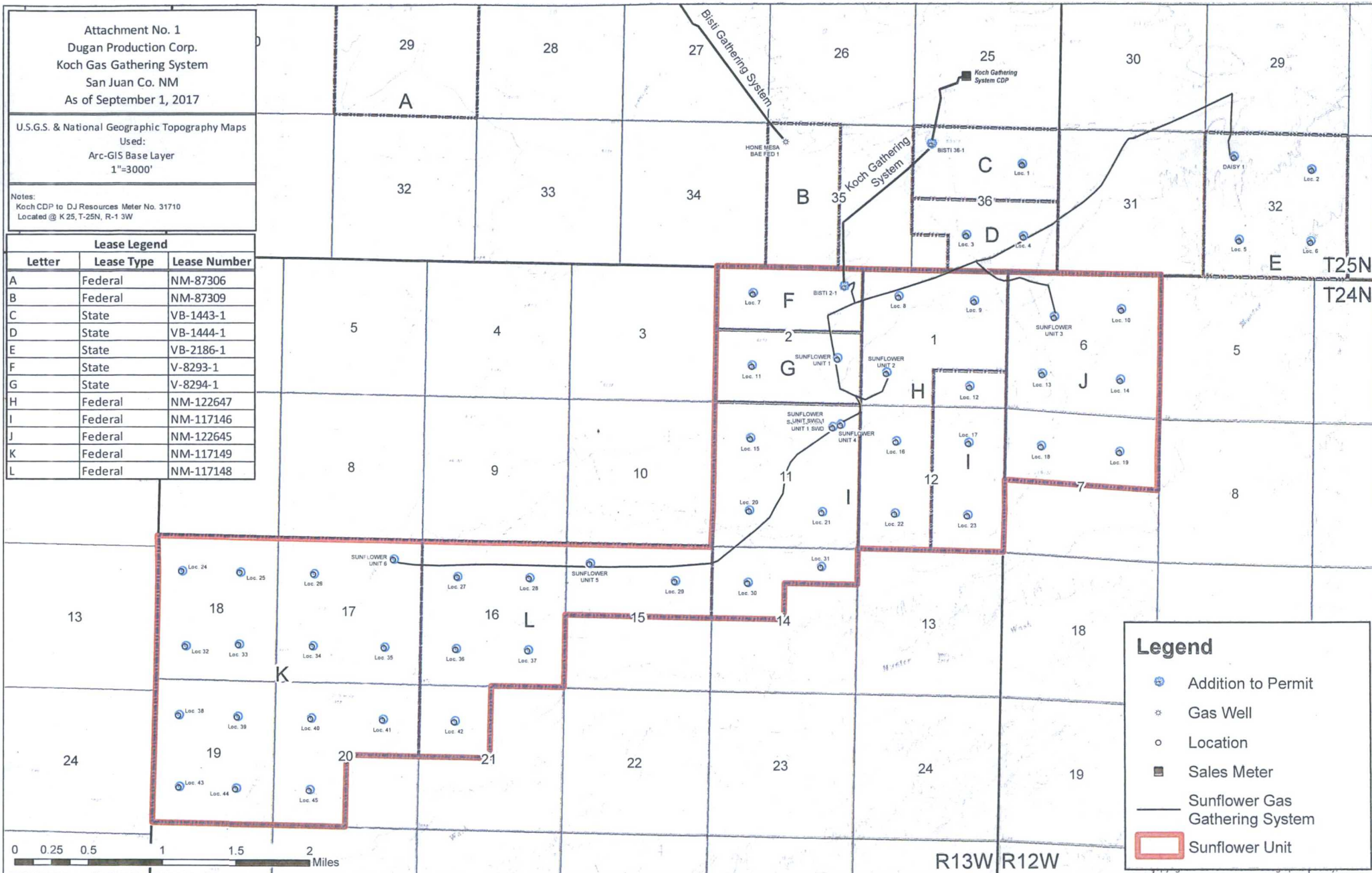
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I	Federal	NM-117146
J	Federal	NM-122645
K	Federal	NM-117149
L	Federal	NM-117148



Legend

- Addition to Permit
- Gas Well
- Location
- Sales Meter
- Sunflower Gas Gathering System
- Sunflower Unit

Well Name	API # 30-045-	Surface Location		Lease Type	Communication Agreement No. (If Established)	Pool	Completion Date	Current Status (C)	Current Average Production (C)		Spacing Unit	Dates for SC, OLM & S (C)	
		%	Sec-Twn-Rng						BOFPD	MCFD		Application	BLM
WELLS TO BE ADDED (S4 WELLS)													
Bishi 2 #1	35386	NENE	2-24N-13W	VO-8293-1	State	Basin Fruitland Coal	11/11/2013	P	0	5.66	48.77	E/2 299.01	10/2/2017
Bishi 36 #1	35385	NW1W	36-25N-13W	VB-1443-1	State	Basin Fruitland Coal	11/11/2013	P	0	132	54.78	W/2 320	10/2/2017
Daisy #1	35752	NW1W	2-25N-12W	VB-2186-1	State	Basin Fruitland Coal	TBD	Loc B	NA	NA	NA	W/2 320	10/2/2017
Sunflower Unit #1	35773	NESW	2-24N-13W	V-8294-1	State	Basin Fruitland Coal	TBD	Loc B	NA	NA	NA	E/2 299.01	10/2/2017
Sunflower Unit #2	TBD	SW5W	1-24N-13W	NM-122647	Federal	Basin Fruitland Coal	TBD	Loc A	NA	NA	NA	TBD	10/2/2017
Sunflower Unit #3	TBD	SE1W	6-24N-12W	NM-122646	Federal	Basin Fruitland Coal	TBD	Loc A	NA	NA	NA	TBD	10/2/2017
Sunflower Unit #4	TBD	NENE	11-24N-13W	NM-117146	Federal	Basin Fruitland Coal	TBD	Loc A	NA	NA	NA	TBD	10/2/2017
Sunflower Unit #5	TBD	NW1W	15-24N-13W	NM-117148	Federal	Basin Fruitland Coal	TBD	Loc A	NA	NA	NA	TBD	10/2/2017
Sunflower Unit #6	TBD	NENE	17-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	Loc A	NA	NA	NA	TBD	10/2/2017
Future Location #1	TBD	NE	36-25N-13W	VB-1443-1	State	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #2	TBD	NE	32-25N-12W	VB-2186-1	State	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #3	TBD	SW	36-25N-13W	VB-1444-1	State	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #4	TBD	SE	32-25N-12W	VB-2186-1	State	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #5	TBD	SW	32-25N-12W	VB-2186-1	State	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #6	TBD	SE	32-25N-12W	VB-2186-1	State	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #7	TBD	NW	2-24N-13W	VO-8293-1	State	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #8	TBD	NW	1-24N-13W	NM-122647	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #9	TBD	NE	1-24N-13W	NM-122647	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #10	TBD	NE	6-24N-12W	NM-122645	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #11	TBD	SW	2-24N-13W	VO-8294-1	State	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #12	TBD	SE	1-24N-13W	NM-117146	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #13	TBD	SW	6-24N-12W	NM-122645	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #14	TBD	SE	6-24N-12W	NM-122645	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #15	TBD	NW	11-24N-13W	NM-117146	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #16	TBD	NW	12-24N-13W	NM-122647	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #17	TBD	NE	12-24N-13W	NM-117146	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #18	TBD	NW	7-24N-12W	NM-122645	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #19	TBD	NE	7-24N-12W	NM-122645	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #20	TBD	SW	11-24N-13W	NM-117146	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #21	TBD	SE	11-24N-13W	NM-117146	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #22	TBD	SW	12-24N-13W	NM-122647	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #23	TBD	SE	12-24N-13W	NM-117146	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #24	TBD	NW	18-24N-12W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #25	TBD	NE	18-24N-12W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #26	TBD	NW	17-24N-12W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #27	TBD	NW	16-24N-12W	NM-117148	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #28	TBD	NE	16-24N-13W	NM-117148	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #29	TBD	NE	11-24N-13W	NM-117148	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
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Future Location #33	TBD	SE	18-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #34	TBD	SW	17-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #35	TBD	SE	17-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
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Future Location #37	TBD	SE	16-24N-13W	NM-117148	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #38	TBD	NW	19-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #39	TBD	NE	19-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #40	TBD	NW	20-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #41	TBD	NE	20-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #42	TBD	NW	21-24N-13W	NM-117148	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #43	TBD	SW	19-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #44	TBD	SE	19-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017
Future Location #45	TBD	SW	20-24N-13W	NM-117149	Federal	Basin Fruitland Coal	TBD	LOC	NA	NA	NA	TBD	10/2/2017

1 - Status of well 9/29/17

Loc = proposed general location

LOC A = proposed location - staked

LOC B = proposed location - APD submitted

NC = not connected to gathering system

P = producing, includes wells temporarily shut in but able to produce

2 - PREVIOUS YEARS AVERAGE PRODUCTION (June 2016-July 2017)

Cumulative 6-month prod 2-2017 thru 7-2017

Well Name mcf mcf

Bishi 2 #1 6,806 1,389

Bishi 36 #1 186,020 9,958

3 - The Koch Gathering System currently has 2 wells connected and sale gas at an Elm Ridge CDP:

(CDP) located in NESW, Section 25, T-25N, R-13W on Elm Ridge Field Services Meter No. 31710.

4 - Proposed well location has not been staked. Spacing unit has not been determined.

Page 1 of 5

[illegible][illegible]

ATTACHMENT NO. 3 – PAGE 2 OF 5
Dugan Production Corp.

<u>Well Name</u>	<u>Pool</u>	<u>Lease #</u>	<u>Location</u>	<u>Spacing Unit</u>
Bisti 2-1	Basin Fruitland Coal	VO8293	NENE 2-24N-13W	E/2-299.01A
Loc. 7	Basin Fruitland Coal	VO8293	NW/4 2-24N-13W	W/2-320.0A

INTEREST OWNER

	<u>INTEREST%</u>	
	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u> Dugan Production Corp.	100.000000	83.333333

<u>Royalty</u> State of New Mexico New Mexico State Land Office P.O. Box 1148 Santa Fe, NM 87504-1148	-0-	16.666667
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<u>TOTAL WELL</u>	<u>100.000000</u>	<u>100.000000</u>
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Dugan Production Corp.

<u>Well Name</u>	<u>Pool</u>	<u>Lease #</u>	<u>Location</u>	<u>Spacing Unit</u>
Bisti State 36-1	Basin Fruitland Coal	VB-1443	NWNW 36-25N-13W	W/2-320.0A
Loc. 1	Basin Fruitland Coal	VB-1443	NE/4 36-25N-13W	E/2-320.0A

INTEREST OWNER

	<u>INTEREST%</u>	
	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u> Dugan Production Corp.	100.000000	81.250000

<u>Royalty</u> State of New Mexico New Mexico State Land Office P.O. Box 1148 Santa Fe, NM 87504-1148	-0-	18.750000
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<u>TOTAL WELL</u>	<u>100.000000</u>	<u>100.000000</u>
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Dugan Production Corp.

<u>Well Name</u>	<u>Pool</u>	<u>Lease #</u>	<u>Location</u>	<u>Spacing Unit</u>
Loc. 3	Basin Fruitland Coal	VB-1444	SW/4 36-25N-13W	W/2-320.0A
Loc.4	Basin Fruitland Coal	VB-1444	SE/4 36-25N-13W	E/2-320.0A

INTEREST OWNER

	<u>INTEREST%</u>	
	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u> Dugan Production Corp.	100.000000	81.250000

<u>Royalty</u> State of New Mexico New Mexico State Land Office P.O. Box 1148 Santa Fe, NM 87504-1148	-0-	18.750000
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<u>TOTAL WELL</u>	<u>100.000000</u>	<u>100.000000</u>
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ATTACHMENT NO. 3 – PAGE 3 OF 5
Dugan Production Corp.

<u>Well Name</u>	<u>Pool</u>	<u>Lease #</u>	<u>Location</u>	<u>Spacing Unit</u>
Daisy 1	Basin Fruitland Coal	VB-2186	NWNW 32-25N-12W	W/2-320.0A
Loc. 2	Basin Fruitland Coal	VB-2186	NE/4 32-25N-12W	E/2-320.0A
Loc. 5	Basin Fruitland Coal	VB-2186	SW/4 32-25N-12W	W/2-320.0A
Loc. 6	Basin Fruitland Coal	VB-2186	SE/4 32-25N-12W	E/2-320.0A

INTEREST OWNER

	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u> Dugan Production Corp.	100.000000	81.250000

<u>Royalty</u> State of New Mexico New Mexico State Land Office P.O. Box 1148 Santa Fe, NM 87504-1148	-0-	18.750000
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TOTAL WELL	<u>100.000000</u>	<u>100.000000</u>
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Dugan Production Corp.

<u>Well Name</u>	<u>Pool</u>	<u>Lease #</u>	<u>Location</u>	<u>Spacing Unit</u>
Sunflower Unit 1	Basin Fruitland Coal	VO-8294	NESE 2-24N-13W	E/2-299.01A
Loc. 11	Basin Fruitland Coal	VO-8294	SW/4 2-24N-13W	E/2-320.0A

INTEREST OWNER

	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u> Dugan Production Corp.	100.000000	83.333333

<u>Royalty</u> State of New Mexico New Mexico State Land Office P.O. Box 1148 Santa Fe, NM 87504-1148	-0-	16.666667
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TOTAL WELL	<u>100.000000</u>	<u>100.000000</u>
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Dugan Production Corp.

<u>Well Name</u>	<u>Pool</u>	<u>Lease #</u>	<u>Location</u>	<u>Spacing Unit</u>
Sunflower Unit 2	Basin Fruitland Coal	NM122647	SW/4 1-24N-13W	W/2-320.0A
Loc. 8	Basin Fruitland Coal	NM122647	NW/4 1-24N-13W	W/2-320.0A
Loc. 9	Basin Fruitland Coal	NM122647	NE/4 1-24N-13W	E/2-320.0A
Loc. 16	Basin Fruitland Coal	NM122647	NW/4 12-24N-13W	W/2-320.0A
Loc. 22	Basin Fruitland Coal	NM122647	SW/4 12-24N-13W	W/2-320.0A

INTEREST OWNER

	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u> Dugan Production Corp.	100.000000	87.500000

<u>Royalty</u> State of New Mexico New Mexico State Land Office P.O. Box 1148 Santa Fe, NM 87504-1148	-0-	12.500000
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TOTAL WELL	<u>100.000000</u>	<u>100.000000</u>
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ATTACHMENT NO. 3 – PAGE 4 OF 5
Dugan Production Corp.

<u>Well Name</u>	<u>Pool</u>	<u>Lease #</u>	<u>Location</u>	<u>Spacing Unit</u>
Sunflower Unit 4	Basin Fruitland Coal	NM117146	NE/4 11-24N-13W	E/2-320.0A
Loc. 12	Basin Fruitland Coal	NM117146	SE/4 1-24N-13W	W/2-320.0A
Loc. 15	Basin Fruitland Coal	NM117146	NW/4 11-24N-13W	E/2-320.0A
Loc. 17	Basin Fruitland Coal	NM117146	NE/4 12-24N-13W	W/2-320.0A
Loc. 20	Basin Fruitland Coal	NM117146	SW/4 11-24N-13W	W/2-320.0A
Loc. 21	Basin Fruitland Coal	NM117146	SE/4 11-24N-13W	
Loc. 23	Basin Fruitland Coal	NM117146	SE/4 12-24N-13W	
Loc. 30	Basin Fruitland Coal	NM117146	NW/4 14-24N-13W	
Loc. 31	Basin Fruitland Coal	NM117146	NE/4 14-24N-13W	

INTEREST OWNER

	<u>INTEREST%</u>	
	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u> Dugan Production Corp.	100.000000	87.500000
<u>Royalty</u> USA-Bureau of Land Management 6251 College Blvd., Suite A Farmington, NM 87402	-0-	12.500000
<u>TOTAL WELL</u>	<u>100.000000</u>	<u>100.000000</u>

Dugan Production Corp.

<u>Well Name</u>	<u>Pool</u>	<u>Lease #</u>	<u>Location</u>	<u>Spacing Unit</u>
Sunflower Unit 3	Basin Fruitland Coal	NM122645	NW/4 6-24N-13W	W/2-320.0A
Loc. 10	Basin Fruitland Coal	NM122645	NE/4 6-24N-12W	E/2-320.0A
Loc. 13	Basin Fruitland Coal	NM122645	SW/4 6-24N-12W	W/2-320.0A
Loc. 14	Basin Fruitland Coal	NM122645	SE/4 6-24N-12W	E/2-320.0A
Loc. 18	Basin Fruitland Coal	NM122645	NW/4 7-24N-12W	N/2-320.0A
Loc. 19	Basin Fruitland Coal	NM122645	NE/4 7-24N-12W	N/2-320.0A

INTEREST OWNER

	<u>INTEREST%</u>	
	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u> Dugan Production Corp.	100.000000	87.500000
<u>Royalty</u> USA-Bureau of Land Management 6251 College Blvd., Suite A Farmington, NM 87402	-0-	12.500000
<u>TOTAL WELL</u>	<u>100.000000</u>	<u>100.000000</u>

Dugan Production Corp.

<u>Well Name</u>	<u>Pool</u>	<u>Lease #</u>	<u>Location</u>	<u>Spacing Unit</u>
Sunflower Unit 5	Basin Fruitland Coal	NM117148	NW/4 6-24N-13W	W/2-320.0A
Loc. 27	Basin Fruitland Coal	NM117148	NE/4 6-24N-12W	W/2-320.0A
Loc. 28	Basin Fruitland Coal	NM117148	SW/4 6-24N-12W	E/2-320.0A
Loc. 29	Basin Fruitland Coal	NM117148	SE/4 6-24N-12W	W/2-320.0A
Loc. 36	Basin Fruitland Coal	NM117148	NW/4 7-24N-12W	W/2-320.0A
Loc. 37	Basin Fruitland Coal	NM117148	NE/4 7-24N-12W	
Loc. 42	Basin Fruitland Coal	NM117148		

INTEREST OWNER

	<u>INTEREST%</u>	
	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u> Dugan Production Corp.	100.000000	87.500000
<u>Royalty</u> USA-Bureau of Land Management 6251 College Blvd., Suite A Farmington, NM 87402	-0-	12.500000
<u>TOTAL WELL</u>	<u>100.000000</u>	<u>100.000000</u>

ATTACHMENT NO. 3 – PAGE 5 OF 5
Dugan Production Corp.

<u>Well Name</u>	<u>Pool</u>	<u>Lease #</u>	<u>Location</u>	<u>Spacing Unit</u>
Sunflower Unit 6	Basin Fruitland Coal	NM117149	NE/4 17-24N-13W	E/2-320.0A
Loc. 24	Basin Fruitland Coal	NM117149	NW/4 18-24N-13W	W/2-320.0A
Loc. 25	Basin Fruitland Coal	NM117149	NE/4 18-24N-13W	E/2-320.0A
Loc. 26	Basin Fruitland Coal	NM117149	NW/4 17-24N-13W	W/2-320.0A
Loc. 32	Basin Fruitland Coal	NM117149	SW/4 18-24N-13W	W/2-320.0A
Loc. 33	Basin Fruitland Coal	NM117149	SE/4 18-24N-13W	E/2-320.0A
Loc. 34	Basin Fruitland Coal	NM117149	SW/4 17-24N-13W	W/2-320.0A
Loc. 35	Basin Fruitland Coal	NM117149	SE/4 17-24N-13W	E/2-320.0A
Loc. 38	Basin Fruitland Coal	NM117149	NW/4 19-24N-13W	W/2-320.0A
Loc. 39	Basin Fruitland Coal	NM117149	NE/4 19-24N-13W	E/2-320.0A
Loc. 40	Basin Fruitland Coal	NM117149	NW/4 20-24N-13W	W/2-320.0A
Loc. 41	Basin Fruitland Coal	NM117149	NE/4 20-24N-13W	E/2-320.0A
Loc. 43	Basin Fruitland Coal	NM117149	SW/4 19-24N-13W	W/2-320.0A
Loc. 44	Basin Fruitland Coal	NM117149	SE/4 19-24N-13W	E/2-320.0A
Loc. 45	Basin Fruitland Coal	NM117149	SW/4 20-24N-13W	W/2-320.0A

INTEREST OWNER

	<u>INTEREST%</u>	
	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u> Dugan Production Corp.	100.000000	87.500000
<u>Royalty</u> USA-Bureau of Land Management 6251 College Blvd., Suite A Farmington, NM 87402	-0-	12.500000
<u>TOTAL WELL</u>	<u>100.000000</u>	<u>100.000000</u>

**ATTACHMENT NO. 4
PRODUCTION SUMMARY
WELLS CONNECTED OR TO BE CONNECTED TO DUGAN PRODUCTION'S
KOCH GATHERING SYSTEM**

POOL NAME & CODE	AVERAGE BTU btu/scf	WELLS OR COMPLETIONS ①		POOL PRODUCTION ALL WELLS - mcf/d ②		AVERAGE PRODUCTION PER WELL - mcf/d ②	
		EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
Koch Gathering System							
BASIN FRUITLAND COAL	975	2(2)	52(0)	136	0	68	0

Calculated BTU of commingled production = 975 btu/scf for all wells (existing and proposed) during July 2017.

Calculated value of commingled production: commingling is necessary to get produced natural gas to a gas sales meter from 2

low volume gas wells. CDP gas revenue and MMBTU will be allocated to individual wells using factors determined from the MMBTU

produced from each well. Each well will be equipped with an allocation meter. Data indicates average production was 68 MCFD from 2 wells

There should be no loss in value to any well as a result of this commingling.

Notes:

① - Wells as of 7-1-2017. Existing = wells currently approved for gathering system. Proposed = wells & locations to be added to gathering system.

Active completions in parentheses.

② - Production data from July 2016-2017

**Attachment No. 4
Dugan Production's
Lease Summary**

Koch Gathering System Leases

Federal Leases

NM-122647	NM-117146	NM-122645	NM-117148	NM-117149
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State Leases

VB-1443-1	VB-1444-1	VB-2186-1	VO-8293-1	VO-8294-1
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ATTACHMENT NO. 5
Allocation Procedures
Dugan Production Corp.'s
Koch Gathering System
DJ Resources Meter #31710 located @ NESW 25, T-25N, R-13W
San Juan County, New Mexico

Base Data:

U = Water Volume (BWPD) from Periodic Well Test x days operated during allocation period.

V = Water Volume (bbl) at Central Battery during allocation period.

W = Gas Volume (MCF) from allocation meters at individual wells and central battery separator during allocation period.

X = Gas Volume (MCF) from CDP Sales Meter during allocation period.

Y = BTU's from CDP Sales Meter during allocation period.

Allocation Period is typically a calendar month and will be the same for all wells.

1. Individual Well Gas Production = A + B + C + D + E + F

A = Allocated Sales Volume, MCF = $(W/\text{SUM } W) \times X$

B = On lease fuel usage, MCF. Determined from equipment specifications, operating conditions and days operated.

C = Purged and/or vented gas from well and/or lease equipment, MCF. Calculated using equipment specifications and pressures.

D = Allocated fuel from gathering system equipment, MCF. The total fuel required to operate gathering system equipment will be allocated to the individual wells benefiting from the equipment using allocation factors determined by $(W/\text{SUM } W)$ for the wells involved.

E = Allocated volume of gas lost and/or vented from the gathering system and/or gathering system equipment, MCF. The total volume will be determined using industry accepted procedures for the conditions existing at the time of the loss. All volumes corresponding to liquid condensation within the gathering system will also be determined. The total volume lost and/or vented will be allocated to the individual wells affected using factors determined by $(W/\text{SUM } W)$.

F = Allocated gas sales volume (MCF) associated with water production = (A) in mcf for the central battery separator multiplied by a factor of $(U/\text{SUM } U)$ for wells delivering gas and water to the central battery separator.

2. Allocated Individual Well BTU's = $((W \times \text{Individual well BTU})/\text{Sum } (W \times \text{individual well BTU})) \times Y$.

Individual well gas heating values to be determined in accordance with BLM regulations (currently Onshore Order No. 5).

3. Individual Well Water Production = Allocated production volume, bbl = $(U/\text{Sum } U) \times V$.

ATTACHMENT 6
DIRECT CONNECT VS CONNECTION TO KOCH GATHERING SYSTEM
2 WELLS PROPOSED FOR GATHERING SYSTEM

	Direct Connect to PL		Connect to KGS	
Wells to be added	2	Wells to be added	2	
Lines needed	1	Lines needed	0	
Total PL length (feet)	1,500	Total PL length (feet)	0	
Average PL length per well (feet/well)	750	Average PL length per well (feet/well)	0	
Surface disturbance w/40' ROW (acres)	1	Surface disturbance w/40' ROW (acres)	0	
# additional compressors needed	1	# additional compressors needed	0	
Additional compressor hp (horsepower)	118	Additional compressor hp (horsepower)	0	
Additional compressor fuel usage (MCF/year)	7,227	Additional compressor fuel usage (MCF/year)	0	
Engine exhaust volume (SCF)	57,984	Engine exhaust volume (MCF)	0	
Value of fuel gas - (\$/year) @\$3.00/mmbtu	\$21,681	Value of fuel gas - (\$/year) @\$3.00/mmbtu	\$0	
Pipeline Tap (USD) \$131,000.00/line	\$131,000	Pipeline Tap (USD) \$5,000/well	\$0	
Pipeline Installation Cost (USD) \$38/foot	\$57,000	Pipeline Installation Cost (USD) \$15/foot	\$0	
Pipeline Pigging System Cost (USD) \$10,000/line	\$10,000	Pipeline Pigging System Cost (USD) *Already in place	\$0	Difference
Additional costs (USD)	\$219,681	Additional Costs	\$0	\$219,681
Surface Disturance (Acres)	1.4	Surface Disturbance	0.0	1
Additional Emissions (SCF)	7,248	Additional Emissions	0	7,248

Other Considerations

Paleontology Significance

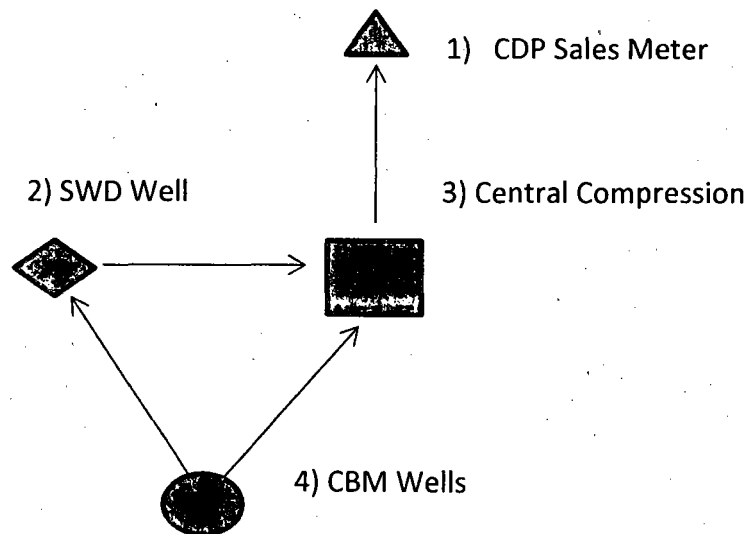
- Carson Fossil Pocket (T-25N, R-13W)
- Fossil Forest (T-23N, R-13W)
- Lybrook Fossil Area (T-23N, R-8 & 9W)

Wilderness Area

- Bisti De-Na Zin (T-24N, R-11, 12 & 13W)

Attachment #7

Gathering System Block Diagram



Notes:

Produced gas from wells will be commingled as well as produced water. All produced water will be piped to the sunflower SWD and disposed of at that location. The produced water will be passed through a separator and any gas that is separated will be returned to the gas pipeline.

Attachment No. 8
Interest Ownership Notification
Dugan Production Corp.'s Application dated 10/2/17
Proposing the Addition of 54 Wells to
Dugan Production's Koch Gathering System

Presenting evidence that interest ownership in the Koch Gathering System and the 52 wells proposed to be added have been given notice of Dugan's application, attached is:

1. The royalty interest for all 54 wells/locations being added is either federal (42 wells/locations), or State (12 wells/locations). There is no fee royalty. Since the subject application is addressed to the Farmington Field Office of the Bureau of Land Management (for federal leases), and the New Mexico State Land Office (for state leases) a separate notice to royalty interest owners was not needed. The applications were sent by certified mail with a return receipt requested and upon receiving the receipts, copies will be sent to the NMOCD.
2. Copy of the "Affidavit of Publication" for our advertisement published in the Legal Notice section of the Sunday, September 24th, 2017 issue of the Farmington Daily Times regarding the subject application to add 52 wells/locations to Dugan's Koch Gathering System. This publication was made in anticipation that of the notice mailed to five interest owners, there will be at least one either returned for some reason or the return receipt will be lost in the mail.

Koch Gas Gathering System Interest Owners Address List

(wells with ownership interest in parentheses)

a=Bisti State 2-1 & Loc. 7; b=Bisti 36-1 & Loc. 1; c=Loc. 3 & 4; d=Daisy 1, Loc.2,5,6; e=Sunflower Unit 1 & Loc. 11;
f = Sunflower Unit 2, Loc. 8,9,16,22; g = Sunflower Unit 4, Loc. 12,15,17,20,21,23,30,31;
h=Sunflower Unit 3, Loc. 10,13,14,18,19; i=Sunflower Unit 5, Loc. 27,28,29,36,37,42;
j=Sunflower Unit 6, Loc. 24,25,26,32,33,34,35,38,39,40,41,43,44,45

Working Interest Owners

Dugan Production Corp. (all)
PO Box 420
Farmington, NM 87499-0420

Royalty Interest Owners

USA-Bureau of Land Management (f thru j)
6251 College Blvd., Suite A
Farmington, NM 87402

State of New Mexico (a thru e)
P. O. Box 1148
Santa Fe, NM 87504-1148

AFFIDAVIT OF PUBLICATION

Ad No. 74327

STATE OF NEW MEXICO

County of San Juan:

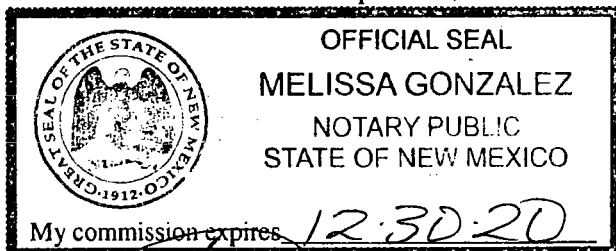
SAMMY LOPEZ, being duly sworn says: That She IS the PRESIDENT of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the State of New Mexico for publication and appeared in the Internet at The Daily Times web site on the following day(s):

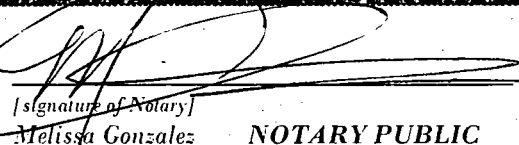
Sunday, September 24, 2017

And the cost of the publication is \$96.32



SAMMY LOPEZ appeared before me, whom I know personally to be the person who signed the above document on the 25th of September, 2017.




[signature of Notary]
Melissa Gonzalez NOTARY PUBLIC

COPY OF PUBLICATION

Dugan Production Corp. is applying to the Bureau of Land Management (BLM), New Mexico Oil Conservation Division (NMOCD), and the New Mexico State Land Office (NMSLO), for regulatory approvals to create a new gathering system and add 2 existing wells plus 52 future locations to Dugan Production's Koch Gathering System (KGS). This will require the surface commingling of produced natural gas plus the off-lease measurement and sale of natural gas. There will not be any commingling of oil or condensate. Dugan Production is also requesting that wells connected to the gathering system also be approved for providing natural gas as a "beneficial use" to field equipment necessary to operate the gathering system. The wells to be added and the existing gathering system are located within Section 36 of T-25N, R-13W, Section 32 of T-25N, R-12W, Sections 1-2, 11-12, 14-21 of T-24N, R-13W and Sections 6&7 of T-24N, R-12W; all located in San Juan County, New Mexico. The gathering system currently has 2 wells which are completed in the Basin Fruitland Coal gas pool and are operated by Dugan Production Corp. The wells to be added are located upon, or the spacing units include, the following leases held by Dugan Production Corp.: Federal leases NM-122647, NM-117146, NM-122645, NM-117148, NM-117149; State leases VB-1443-1, VB-1444-1, VB-2186-1, V-8293-1, V-8294-1. The wells to be added are: Dugan Production's Bisti 2 #1 and Bisti 36 #1. The wells being added should have with no affect upon the existing production. Any person holding an interest in any of these leases or wells may contact Dugan Production Corp. for

additional information. Inquiries should be directed to Kevin Smaka at 505-325-1821 or by mail at P. O. Box 420, Farmington, NM 87499. Any objection or request for a formal hearing should be filed in writing with the NMOCD's Santa Fe Office within 20 days from the date of this publication. In the absence of objection, Dugan Production Corp. is requesting that the NMOCD approve its application administratively. The NMOCD's address is 1220 South St. Francis Drive, Santa Fe, NM 87505.

Legal No. 74327 published in The Daily Times on September 24, 2017.

REC'D SEP 28 2017

10/2/2017	DPC	Notice & Request to Surface Commingle & Off-Lease Msmt	Application for SC & OLM - Koch GS - 54 wells	Sent to NM Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, NM 87505
10/2/2017	DPC	Notice & Request to Surface Commingle & Off-Lease Msmt	Application for SC & OLM - Koch GS - 54 wells	Sent Certified Mail to Bureau of Land Management, 6251 College Blvd., Farmington, NM 87402 - Cert #7015 0640 0002 3192 1764
10/2/2017	DPC	Notice & Request to Surface Commingle & Off-Lease Msmt	Application for SC & OLM - Koch GS - 54 wells	Sent Certified Mail to NM State Land Office, PO Box 1148, Santa Fe, NM 87504-1148 - Cert #7015 0640 0002 3192 1948

September 13, 2017

Mr. David Catanach, Director
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Mr. Aubrey Dunn, Commissioner
New Mexico State Land Office
P. O. Box 1148
Santa Fe, NM 87504-1148

Mr. Fields, Field Manager
BLM Etc.

Re: Application to surface commingle and for the Off-Lease
Measurement/sale of produced natural gas at Dugan Production's newly formed Koch
Gas Gathering System
San Juan County, New Mexico

Dear Mr. Catanach, Mr. Dunn and Mr. Fields,

We are writing to request your administrative approvals to create Dugan Production's Koch gathering system that requires approval for the surface commingling, off-lease measurement and sale of natural gas produced from 2 existing wells and 52 proposed locations. Gas will be allocated to each well by allocation meters located at each well. NMOCD Form 107-B is attached with this application. A summary presenting the wells and production for each pool is presented on Attachment No. 4. Gas sales for the KGS will occur at Elm Ridge meter 31710, located in the NESW quarter of section 25, T-25N, R-13W. We are also requesting the NMOCD include a provision in their order that for future additions to the KGS, only the interest owners in the wells being added need to be notified, providing that it is reasonably certain that the proposed additions will not adversely affect the interest owners in the wells already approved for the gathering system. This provision will be very helpful and will significantly reduce the work effort necessary to add future wells to the gathering system.

The KGS was obtained by DPC on July 9, 2015. Upon review of NMOCD records it was determined that Koch Exploration Resources LLC had not acquired the necessary approvals to commingle production or conduct off-lease measurement. Currently there are 2 wells producing and selling natural gas within the KGS. Production currently averages a total of 137 mcf/d for an overall average of 68 mcf/d per well. Well production ranges from 5 to 132 mcf/d. Individual well production for the KGS is presented on Attachment 2 and a summary of pool production is presented on Attachment No. 4.

A description of each attachment has been included for clarity and informational purposes:

Attachment No. 1 presents a map of the KGS with the wells and proposed locations to be added highlighted in blue. In addition, Dugan Production's leases are also presented. The KGS has one central delivery gas sales meter, meter no. 31710, located in the NESW quarter of section 25, T-25-N, R-13W. The meter delivers gas to Elm Ridge Field Services.

Attachment No. 2 presents information for the wells DPC seeks to include in the formation of the Koch Gathering System. At the time of this application there are 2 wells connected and producing gas in the system. One well is considered marginal and the other is considered low volume by definitions found in 43 CFR 3173.

Attachment No. 3 presents the interest ownership for the wells to be added to the KGS. From Attachment No. 3, Dugan Production holds 100% of the working interest in all wells/leases being added and their infill locations. The Bureau of Land Management and State of New Mexico hold interests in the leases and unit being added with this application and will be paid royalty for their interests in the leases and unit. There are no overriding interests in the unit and leases involved. None of the involved leases pay royalty to any tribe or allottee. Attachment No. 8 presents copies of our interest owner notice efforts. All notice letters have been sent by certified mail with return receipts, and upon receiving the receipts, copies will be forwarded to the NMOCD.

Attachment No. 4 presents a summary of the pools, wells, production and leases for the KGS. The KGS will produce gas from the Fruitland Coal and the Fruitland Pictured Cliff Pools. Production from the KGS averages 68 mcf/d and ranges from 5 to 132 mcf/d per well. Dugan Production's leases for the wells in the Koch Gathering System are summarized on Page 2 of Attachment No. 4. The attachment identifies 5 state leases and 6 federal leases that are included in the KGS. No tribal leases are being added with this application.

Attachment No. 5 presents the allocation procedure being used for the KGS.

Attachment No 6 presents a comparison of connecting the proposed wells to the existing KGS as opposed to directly connecting each well to the nearest pipeline which will be Elm Ridge's line at the current CDP. This analysis was done to illustrate the benefits connecting wells to the gathering system.

From Attachment No. 6, to connect 2 wells and infill locations to DPC's KGS will have minimal cost and environmental impact since the wells were produced connected to the gathering system prior to DPC acquiring the wells.

If each well and lease, where possible, were to be individually connected directly to DJ Resources for gas sales, the length of necessary would require DPC install 12 miles of additional pipe and disturb 102 acres of surface. In addition, since we typically will install the required compressor at the well site, the line between the well and connection to the pipeline will be operating at a higher pressure for direct connection, which will require using 4" steel line as opposed to 4" polypipe which will increase the installation costs from \$15/ft to \$38/ft and will result in the pipeline cost increasing from \$724,110.00 for connecting to a gathering system to \$4,237,864.00 for connecting to DJ Resources. In addition, and probably one of the biggest benefits of operating a gathering system is that we can install central gas compression facilities to serve multiple wells and we typically operate our gathering systems at 20 to 30 psig which provides an optimum surface operating pressure for wells connected to it. For direct connect, it will be necessary to install a compressor on each line in order to deliver gas into DJ Resources pipeline which is currently averaging 325 psig. This will require purchasing and installing 8 compressors to deliver the same gas, which will result in using more produced gas for fuel and producing more noise and exhaust gas. In addition, the cost to make a connection to our gathering system averages about \$5,000/tap and meter run where Enterprise will charge an average of \$131,000 for each pipeline tap and meter run. For our analysis, since the infill wells will have the same interest ownership as the initial spacing unit well, we assumed it will be acceptable to connect the infill well to the initial well and use only one line and compressor to deliver the gas to DJ Resources which will not only reduce the necessary pipeline length, but will reduce the meter run and connection cost for the infill well to \$5,000 and enable the infill well to use the compressor installed for the initial well.

Thus considering all factors of connecting to the existing gathering system versus directly connecting to Enterprise pipeline, the total costs presented in attachment 6 are summarized as follows:

<u>Gathering System</u>	<u>Connect to Gathering System</u>	<u>Connect to DJ Resources</u>	<u>Additional Cost for Direct Connections</u>
KGS	\$ 995,791.00	\$ 5,539,132.00	\$ 4,543,341.00

Considering that many of the wells to be added to the KGS are expected be marginal or low volume producers, it will be very important that we receive approval to use the existing gathering system as opposed to directly connecting each well to the pipeline company. Also considering that these wells are in an area that has significant archaeological, cultural, and paleontology presence, plus is in close proximity to two wilderness areas, and is within the threatened and endangered Brack's Cactus and Aztec Gila Habitat, it is important to minimize the surface disturbance and installation of necessary compression equipment.

Attachment No. 7 presents a facility diagram of compression, salt water disposal and gathering system facilities. These facilities have not been constructed at this time. As the unit is developed these facilities will be constructed to maximize our ability to develop the sunflower unit and produce the minerals in this area.

Attachment No. 8 presents Dugan Productions efforts to contact interest owners

In summary, Dugan Production is requesting approvals to:

1. Create the Koch Gathering System.
2. Add 2 existing wells plus 52 future wells to the Koch Gathering System.
3. Authorize the surface commingling of produced gas and produced water.
4. Authorize the off-lease measurement of gas.
5. Authorize the beneficial use of off-lease fuel.

It is anticipated that a majority of the wells on the gathering system will be considered to be low volume producers (200 mcf/d or less) many of which will be marginally economic to operate. Dugan Production has made a substantial investment in the acquisition and development of the Koch gathering system and is optimistic that we will be able to aggressively develop our substantial leasehold interest.

Should you need additional information or have questions regarding this application, please feel free to contact me at the letterhead address.

Sincerely,

Kevin Smaka
Production Engineer

cc: NMOCD – Aztec; All Working Interest Owners

**ATTACHMENT NO. 4
PRODUCTION SUMMARY
WELLS CONNECTED OR TO BE CONNECTED TO DUGAN PRODUCTION'S
KOCH GATHERING SYSTEM**

POOL NAME & CODE	AVERAGE BTU btu/scf	WELLS OR COMPLETIONS ①		POOL PRODUCTION ALL WELLS - mcf ②		AVERAGE PRODUCTION PER WELL - mcf ②	
		EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
Koch Gathering System							
BASIN FRUITLAND COAL	975	2(2)	52(0)	136	0	68	0
Wildcat Pictured Cliff (Unnamed Pool)	NA	NA	NA	NA	NA	NA	NA

Calculated BTU of commingled production = 975 btu/scf for all wells (existing and proposed) during July 2017.

Calculated value of commingled production: commingling is necessary to get produced natural gas to a gas sales meter from 2

low volume gas wells. CDP gas revenue and MMBTU will be allocated to individual wells using factors determined from the MMBTU

produced from each well. Each well will be equipped with an allocation meter. Data indicates average production was 68 MCFD from 2 wells

There should be no loss in value to any well as a result of this commingling.

Notes:

① - Wells as of 7-1-2017. Existing = wells currently approved for gathering system. Proposed = wells & locations to be added to gathering system.

Active completions in parentheses.

② - Production data from July 2016-2017

Note: No wells are currently completed in the WAW Fruitland Sand/PC

Operator Name: DUGAN PRODUCTION CORP		County:San Juan	
Well_Name: BISTI 36 # 001		API:3004535385	
Location: D-36-25.0N-13W 660 FNL 660 FWL			
Pool Name:	BASIN FRUITLAND COAL (GAS)	Gas(MCF)	Day Produced
1/1/2017	0	6521	31
2/1/2017	0	5420	28
3/1/2017	0	3988	31
4/1/2017	0	5465	30
5/1/2017	0	4458	31
6/1/2017	0	5728	30
7/1/2017	0	5439	30
CUM		188020	

Well_Name: BISTI 2 # 001		API:3004535386	
Location: A-2-24.0N-13W 660 FNL 660 FEL			
Pool Name:	BASIN FRUITLAND COAL (GAS)		
Month	Oil(BBLS)	Gas(MCF)	Days Produced
1/1/2017	0	325	31
2/1/2017	0	239	28
3/1/2017	0	231	31
4/1/2017	0	342	30
5/1/2017	0	302	28
6/1/2017	0	147	30
7/1/2017	0	138	30
CUM		66066	

Well Name	API # 30-045-	Surface Location			Completion Date	Current Status ①	Current Average Production ②			Spacing Unit
		X/4	Sec-Twn-Rng	Lease No.			BOPD	MCFD	BWPD	
WELLS TO BE ADDED (54 WELLS)										
Bisti 2 #1	35386	NENE	2-24N-13W	VO-8293-1	11/11/2013	P	0	5.66	48.77	E/2 299.01
Bisti 36 #1	35385	NWNW	36-25N-13W	VB-1443-1	11/11/2013	P	0	132	54.78	W/2 320
Daisy #1	35752	NWNW	32-25N-12W	VB-2186-1	TBD	Loc B	NA	NA	NA	W/2 320
Sunflower Unit #1	35773	NESW	2-24N-13W	Sunflower Unit Well	TBD	Loc B	NA	NA	NA	E/2 299.01
Sunflower Unit #2	TBD	SWSW	1-24N-13W	Sunflower Unit Well	TBD	Loc A	NA	NA	NA	TBD
Sunflower Unit #3	TBD	SENW	6-24N-12W	Sunflower Unit Well	TBD	Loc A	NA	NA	NA	TBD
Sunflower Unit #4	TBD	NENE	11-24N-13W	Sunflower Unit Well	TBD	Loc A	NA	NA	NA	TBD
Sunflower Unit #5	TBD	NWNW	15-24N-13W	Sunflower Unit Well	TBD	Loc A	NA	NA	NA	TBD
Sunflower Unit #6	TBD	NENE	17-24N-13W	Sunflower Unit Well	TBD	Loc A	NA	NA	NA	TBD
Future Location #1	TBD	NE	36-25N-13W	VB-1443-1	TBD	LOC	NA	NA	NA	TBD
Future Location #2	TBD	NE	32-25N-R12W	VB-2186-1	TBD	LOC	NA	NA	NA	TBD
Future Location #3	TBD	SW	36-25N-13W	VB-1444-1	TBD	LOC	NA	NA	NA	TBD
Future Location #4	TBD	SE	32-25N-12W	VB-1444-1	TBD	LOC	NA	NA	NA	TBD
Future Location #5	TBD	SW	32-25N-12W	VB-2186-1	TBD	LOC	NA	NA	NA	TBD
Future Location #6	TBD	SE	32-25N-12W	VB-2186-1	TBD	LOC	NA	NA	NA	TBD
Future Location #7	TBD	NW	2-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #8	TBD	NW	1-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #9	TBD	NE	1-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #10	TBD	NE	6-24N-12W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #11	TBD	SW	2-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #12	TBD	SE	1-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #13	TBD	SW	6-24N-12W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #14	TBD	SE	6-24N-12W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #15	TBD	NW	11-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #16	TBD	NW	12-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #17	TBD	NE	12-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #18	TBD	NW	7-24N-12W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #19	TBD	NE	7-24N-12W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #20	TBD	SW	11-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #21	TBD	SE	11-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #22	TBD	SW	12-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #23	TBD	SE	12-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #24	TBD	NW	18-24N-12W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #25	TBD	NE	18-24N-12W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #26	TBD	NW	17-24N-12W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #27	TBD	NW	16-24N-12W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #28	TBD	NE	16-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #29	TBD	NE	115-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #30	TBD	NW	14-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #31	TBD	NE	14-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #32	TBD	SW	18-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #33	TBD	SE	18-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #34	TBD	SW	17-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #35	TBD	SE	17-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #36	TBD	SW	16-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #37	TBD	SE	16-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #38	TBD	NW	19-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #39	TBD	NE	19-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #40	TBD	NW	20-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #41	TBD	NE	20-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #42	TBD	NW	21-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #43	TBD	SW	19-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #44	TBD	SE	19-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD
Future Location #45	TBD	SW	20-24N-13W	Sunflower Unit Well	TBD	LOC	NA	NA	NA	TBD

Please Note: All wells completed in Basin Fruitland Coal, and Sunflower Unit is approved for the Basin Fruitland Coal and Wildcat Pictured Cliffs Gas Pool
Please Note: there are no plans to complete wells in the Fruitland PC.

1 - Status of well 9/29/17

Loc = proposed general location
LOC A = proposed location - staked
LOC B = proposed location - APD submitted
NC = not connected to gathering system
P = producing, includes wells temporarily shut in but able to produce

2 - PREVIOUS YEARS AVERAGE PRODUCTION (June 2016-July 2017)

Well Name	Cumulative mcf	6-month prod 2-2017 thru 7-2017 mcf
Bisti 2 #1	6,606	1,399
Bisti 36 #1	188,020	9,358

3 - The Koch Gathering System currently has 2 wells connected and sale gas at an Elm Ridge CDP:
(CDP) located in NESW, Section 25, T-25N, R-13W on Elm Ridge Field Services Meter No. 31710.

4 - Proposed well location has not been staked. Spacing unit has not been determined.