11 21 UT

PLC | 7KUR0732527764 APP NO.

ABOVE THIS LINE FOR DIVISION USE C

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -1220 South St. Francis Drive, Santa Fe, NM 87505



		ADMINISTRATIVE APPLICA	TION CHECKLIST	
TH	IS CHECKLIST IS M.	ANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS F WHICH REQUIRE PROCESSING AT THE DIVI		AND REGULATIONS
Applic	[DHC-Dowi	s: ndard Location] [NSP-Non-Standard Prorat nhole Commingling] [CTB-Lease Commin ol Commingling] [OLS - Off-Lease Storag	tion Unit] [SD-Simultaneous Dogling] [PLC-Pool/Lease Come] [OLM-Off-Lease Measurer ure Maintenance Expansion] tion Pressure Increase]	mingling] nent]
[1]	TYPE OF AF	PPLICATION - Check Those Which Apply for Location - Spacing Unit - Simultaneous De NSL NSP SD		
	Check [B]	One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC	C OLS OLM	RECE 2007 NOV 19
	[C]	Injection - Disposal - Pressure Increase - E WFX PMX SWD IP		
	[D]	Other: Specify		
[2]	NOTIFICAT [A]	ION REQUIRED TO: - Check Those Whice Working, Royalty or Overriding Royalty		3 <u>5</u>
	[B]	Offset Operators, Leaseholders or Surf	face Owner	· James J
	[C]	Application is One Which Requires Pu	ublished Legal Notice	
	[D]	Notification and/or Concurrent App U.S. Bureau of Land Management - Commissioner of Pr	proval/by BLM or/SLO	
	[E]	For all of the above, Proof of Notificat	tion or Publication is Attached,	and/or,
	[F]	Waivers are Attached		
[3]		CURATE AND COMPLETE INFORMATATION INDICATED ABOVE.	TION REQUIRED TO PROC	ESS THE TYPE
	al is accurate a	TION: I hereby certify that the information s and complete to the best of my knowledge. I equired information and notifications are subm	also understand that no action	
	Note:	Statement must be completed by an individual with		
	Citchie Type Name	Signature	Regulatory Agent Title	10-25-07 Date
			annritchie@wtor.net	

e-mail Address

District I 1625 N. French Drive, Hobbs, NM 88240 District II 1301 W. Grand Ave, Artesia, NM 88210 District III

1000 Rio Brazos Road, Aztec, NM 87410

1220 S. St Francis Dr, Santa Fe, NM 87505

E-MAIL ADDRESS: ann.ritchie@wtor.net

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-107-B Revised June 10, 2003

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.

OPERATOR NAME: Pogo Pro			DIVERSE	OWNERSHIP)	
APPLICATION TYPE:					
☐ Pool Commingling ☐ Lease Commingli	ng Pool and Lease C	ommingling	e Storage and Meas	surement (Only if not Surface	ce Commingled)
LEASE TYPE: ■ Fee □	State Feder	ral			
Is this an Amendment to existing Orde Have the Bureau of Land Management Yes Do BLM has been notified	(BLM) and State Land . Proposed commingled	d office (SLO) been not l area is comprised of Fe	ified in writing of the land fee land	of the proposed commi	ngling
	` ,	OL COMMINGLIN ts with the following in			
(1) Pool Names and Codes	Gravities / BTU of Non-Commingled Production	Calculated Gravities / BTU of Commingled Production		Calculated Value of Commingled Production	Volumes (Monthly)
Fulcher Kutz-Pictured Cliffs Gas (77200)	983	983		Value of production	4,223 MCF
Basin-Fruitland Coal Gas (71629)	1,053			will not be decreased	230 MCF
				by commingling	
(2) Are any wells producing at top allowa	bles? ☐ Yes ■ No				·
 Pool Name and Code. Is all production from same source of Has all interest owners been notified by Measurement type:	Please attach sheet supply? Yes certified mail of the prop			No	
		LEASE COMMIN			
(1) Complete Sections A and E.					
(D) OFF-LEASE ST	ORAGE and MEA	SUREMENT		
		ets with the following			
 Is all production from same source of Include proof of notice to all interest 	* * *	No			
(E) A.		DRMATION (for all ts with the following in		ypes)	
 A schematic diagram of facility, inclu A plat with lease boundaries showing Lease Names, Lease and Well Number 	ding legal location. Atta all well and facility locati	ached ions. Include lease numbe		ate lands are involved. At	tached
I hereby certify that the information above	trae and complete to the	best of my knowledge and	d belief.		
SIGNATURE: Mufulch	110 T	ITLE: Regulatory Age	e <u>nt</u> r	DATE: 10-25-0	7
TYPE OR PRINT NAME: Ann Ritchie		TELEPHONI	E NO.: <u>(432) 68</u>	34-6381	

New Mexico Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, New Mexico 87505 Attn: Mr. Mark E. Fesmire, P.E., Director

U.S. Bureau of Land Management 1235 La Plata Highway, Suite A Farmington, New Mexico 87401-8731

Attn: Mr. Jim Lovato

Re: Application for Pool/Lease Surface Commingling

Pogo Producing (San Juan) Company Tiger 10 CDP Gas Gathering System San Juan County, New Mexico

Dear Sir:

Pogo Producing (San Juan) Company ("Pogo") hereby requests approval to surface commingle the gas production from two existing gas wells located within a proposed commingled area comprising the E/2 of Section 27, Township 30 North, Range 13 West, NMPM, San Juan County, New Mexico. One of the wells is a single completion in the Fulcher Kutz-Pictured Cliffs Gas Pool (77200) and the other well is a single completion in the Basin-Fruitland Coal Gas Pool (71629).

Pogo further seeks approval to add wells within the commingled area that may be drilled in the future and completed in either the Basin-Fruitland Coal Gas Pool or the Fulcher Kutz-Pictured Cliffs Gas Pool without having to provide additional notice to the interest owners within the commingled area, and without having to amend the commingling order. Pogo will advise the interest owners that are being provided notice of this application that it is requesting this provision be incorporated in the commingling order.

The proposed surface commingling will allow Pogo to utilize a single compressor at the central delivery point, resulting in the reduction of operating costs and extending the economic life of the wells. The resulting increase in the ultimate recovery of gas from these wells will benefit all interest owners in the wells. The proposed surface commingling is also necessary due to topography and the close proximity of these wells to populated areas, and will reduce the environmental impact on these sensitive areas.

Due to the diversity of ownership between the commingled wells, each well will be equipped with a continuously recording allocation meter. Production will be allocated to each of the wells in accordance with the following procedure: The production allocated to each well will be the integrated volume from the CDP gas sales meter, less the sum of the other allocation meters, plus any lease use gas. Lease use gas is estimated to be approximately 2.5 MCF gas per day for those wells equipped with a pumping unit and a separator. In the event the sum of the allocation meters does not equal the integrated volume of the CDP gas sales meter, the gas production from each well will be calculated using the volume its allocation meter indicates, divided by the sum of all the allocation meters. This percentage will then be multiplied times the integrated volume of the CDP gas sales meter, plus lease use gas. The proposed well metering system and method of allocation will protect the correlative rights of all interest owners within the commingled area. Compressor use gas will be allocated ratably to each of the wells.

Pursuant to the requirements of Division Rule 19.15.5.303(B)(4)(b), Enterprise Field Services (or the current operator of the gas sales meter) will calibrate the central delivery point gas sales meter at least quarterly at current production levels. Pogo will operate all allocation meters and will calibrate quarterly all allocation meters that measure more than 100 MCF of gas per day, and will calibrate semi-annually all allocation meters that measure less than 100 MCF of gas per day. All liquids, (oil, condensate and water) will be separated, stored, measured and sold at each individual well. Except for small amounts of water that may drop out of the commingled gas stream at the central processing facility, no commingling of liquids will occur.

The gas gathering system will not degrade the mechanical integrity of the wells or the CDP facility.

It is anticipated that the purging of natural gas and condensed water vapor from the gas gathering lines will occur infrequently. Any lost gas due to purging the system will be allocated ratably to each of the wells.

Attachment No. 1 is a table showing the wells proposed to be surface commingled. Pogo has also included, among other things, each well's API Number, well location, producing formation, and the acreage that is currently dedicated to the well.

Attachment No. 2 shows the current (June, 2007) producing rates for each of the wells to be commingled. The combined monthly production from the wells to be commingled is 4,453 MCF. Of that total, 230 MCF is from the Basin-Fruitland Coal Gas Pool and 4,223 MCF is from the Fulcher Kutz-Pictured Cliffs Gas Pool.

Attachment No. 3 is a map showing the location of the wells and the associated pipelines within the proposed Tiger 10 CDP Gas Gathering System. The central delivery point and Enterprise Field Services gas sales meter is located within the SE/4 Section 27, Township 30 North, Range 13 West, NMPM.

Attachment No. 4 is a map that identifies all wells and leases within the proposed commingled area. As shown on the map, there are two separate Federal leases (Federal Leases No. NM-078213 and NM-078214), and one fee lease within the commingled area.

Attachment No. 5 is a schematic diagram of the commingled facility showing the legal location, tanks, pipes, sales meters, and all other associated equipment. All equipment used in selling, storing and measuring combined production will meet the Onshore Oil & Gas Orders No. 3, Site Security; No. 4, Oil Measurement; and No. 5, Gas Measurement. None of the wells are Navajo allotted/royalty wells.

The natural gas from the pools is believed to be compatible and to date Pogo has not observed any compatibility problems. The BTU content for each of the respective gas pools is very similar, and for that reason, the value of the commingled production will not be less than the value of the individual gas streams. A representative gas analysis for the Fruitland Coal and Pictured Cliffs formations are shown, respectively, as Attachments No. 6, and 7.

A notification letter (copy attached) and a copy of the application have been sent to all parties owning an interest within the proposed commingled area. In addition, enclosed is a list of the parties to which notice has been provided.

In summary, Pogo believes that the proposed surface commingling is in the best interest of conservation, prevention of waste and protection of correlative rights, and that the application should be approved.

Pogo has included with this application, a draft pool/lease commingling order that summarizes the pertinent details.

If additional information is required, please contact me at (432) 684-6381.

Yours Truly,

Ann E. Ritchie, Regulatory Agent Pogo Producing (San Juan) Company

P.O. Box 10340

Midland, Texas 79702

(432) 684-6381

(432) 682-1458-Fax

ann.ritchie@wtor.net

cc: Cathy Wright, Pogo Producing (San Juan) Company-Midland, Texas New Mexico Oil Conservation Division, 1000 Rio Brazos Rd. Aztec, NM 87410

Dedicated Acreage	36.78033 -108.18623 Fed NMSF-078213 SE/4 Section 27 36.78017 -108.18775 Fed NMSF-078214 E/2 Section 27
Lease Number	MSF-078213
Lease	Fed
Lease -atitude Longitude Type	-108.18623 -108.18775
Latitude	36.78033 36.78017
Current Completion	Fulcher Kutz-Pictured Cliffs Gas Pool Basin-Fruitland Coal Gas Pool
Well Location	30N 13W 1250' FSL & 790' FEL 30N 13W 1125' FSL & 1795' FEL
Unit Letter Section Twn. Range	30N 13W 30N 13W
n Twn.	30N
Section	27
Unit Lette	P 27 0 27
API Number	30-045-29975 30-045-33807
Current Operator	Pogo Producing (San Juan) Company 30-045-29975 Pogo Producing (San Juan) Company 30-045-33807
Well Name & Number	Tiger No. 10 Tiger No. 19T

Pogo Producing (San Juan) Company Tiger 10 CDP Gas Gathering System

Well Name & Number	Producing Pool	Current Production (June 2007)
Tiger No. 10	Fulcher Kutz-Pictured Cliffs Gas Pool	4,223 MCF
Tiger No. 19T	Basin-Fruitland Coal Gas Pool	230 MCF
11gc1 (vo. 171	Basin-Fruitiana Coar Gas Fooi	250 MCI

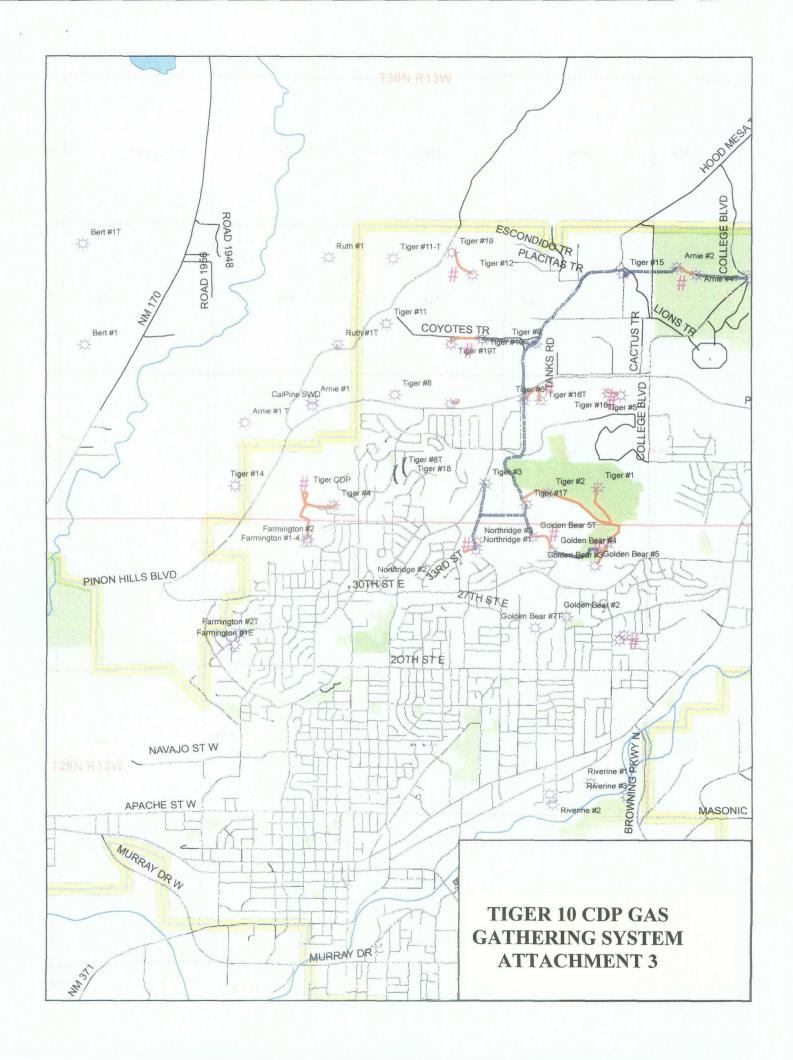
Total Production by Pool: (June, 2007):

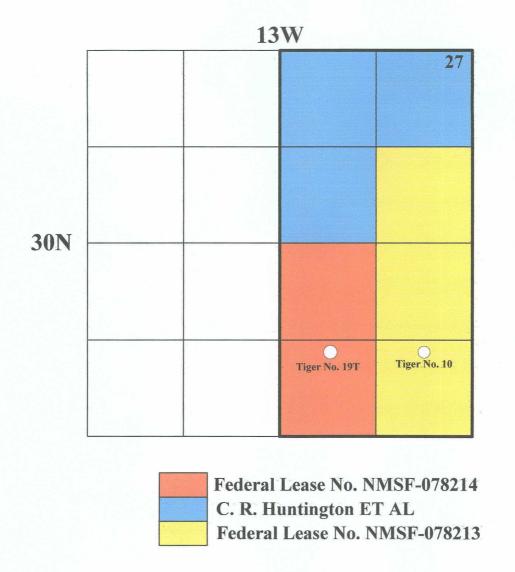
Basin-Fruitland Coal Gas Pool Fulcher Kutz-Pictured Cliffs Gas Pool 230 MCF 4,223 MCF

Total:

4,453 MCF

Attachment 2

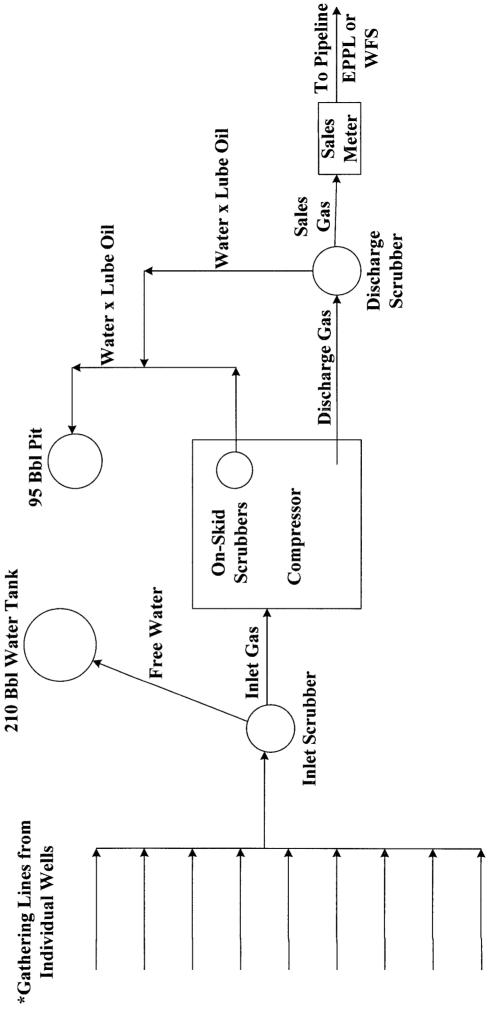




Pogo Producing (San Juan) Company Tiger 10 CDP Gas Gathering System ATTACHMENT 4

POGO PRODUCING (SAN JUAN) COMPANY TYPICAL SAN JUAN BASIN CDP SCHEMATIC AND FLOW DIAGRAM

(Tiger 10 CDP Gas Gathering System Facilities are Located in the SE/4 of Section 27, T-30 North, Range 13 West



ATTACHMENT 5

*Allocation Meters at Each Wellsite



2030 AFTON PLACE FARMINGTON, N.M. 87401 (505) 325-6622

ANALYSIS NO.

PC270023

CUST. NO.

62780 - 10480

WELL/LEASE INFORMATION

CUSTOMER NAME WELL NAME

POGO PRODUCTION SAN JUAN FEDERAL 1-T SOURCE PRESSURE WELLHEAD CASING

SAN JUAN

NM SAMPLE TEMP

PSI G 48 DEG.F

COUNTY/ STATE LOCATION

WELL FLOWING DATE SAMPLED N/A

FIELD

FRUITLAND COAL

SAMPLED BY

03/14/2007

FORMATION CUST.STN.NO.

202A357095

FOREMAN/ENGR.

JAMES MCGAHA

T8409

REMARKS

ANALYSIS					
COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR *	
NITROGEN	0.159	. 0.0000	0.00	0.0015	
CO2	1.272	0.0000	0.00	0.0193	
METHANE	96.120	0.0000	973.02	0.5325	
ETHANE	1.415	0.3782	25.10	0.0147	
PROPANE	0.593	0.1633	14.96	0.0090	
I-BUTANE	0.100	0.0327	3.26	0.0020	
N-BUTANE	0.140	0.0441	4.58	0.0028	
I-PENTANE	0.048	0.0176	1.92	0.0012	
N-PENTANE	0.035	0.0127	1.41	0.0009	
HEXANE PLUS	0.118	0.0519	6.07	0.0038	
TOTAL	100.000	0.7005	1,030.32	0.5877	

^{14.730} PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY * @

14.730 PSIA & 60 DEG. F. ** @

COMPRESSIBLITY FACTOR	(1/Z)	1.0020
BTU/CU.FT (DRY) CORRECTED FOR	(1/Z)	1,032.6
BTU/CU.FT (WET) CORRECTED FOR	(1/Z)	1,015.5
REAL SPECIFIC GRAVITY		0.5888

ANALYSIS RUN AT

14.730 PSIA & 60 DEGREES F

DRY BTU @ 14.650	1,027.0	CYLINDER #	7005	
DRY BTU @ 14.696	1,030.2	CYLINDER # CYLINDER PRESSURE	7005 68	PSIG
DRY BTU @ 14.730	1,032.6	DATE RUN	03/14/200	
DRY BTU @ 15.025	1,053.3	ANALYSIS RUN BY		ROBERTS



2030 AFTON PLACE FARMINGTON, N.M. 87401 (505) 325-6622

ANALYSIS NO.

PC260024

CUST. NO.

62780 - 10490

WELL/LEASE INFORMATION

CUSTOMER NAME

POGO PRODUCTION

SOURCE

WELL NAME COUNTY/ STATE ARNIE 1 (PC) SAN JUAN

PRESSURE

PSI G 21

LOCATION

NM

SAMPLE TEMP WELL FLOWING

DEG.F 65

DATE SAMPLED

6/13/2006

PICTURED CLIFFS

SAMPLED BY

FOREMANIENGR.

REMARKS

FIELD

FORMATION

CUST.STN.NO.

ANALYSIS	
GPM**	

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR *
NITROGEN	4.343	0.0000	0.00	0.0420
CO2	4.821	0.0000-	0.00	0.0733
METHANE	87.101	0.0000	881.72	0.4825
ETHANE	2.413	0.6450	42.80	0.0251
PROPANE	0.886	0.2440	22.35	0.0135
I-BUTANE	0.235	0.0769	7.66	0.0047
N-BUTANE	0.108	0.0340	3.53	0.0022
I-PENTANE	0.050	0.0183	2.01	0.0012
N-PENTANE	0.010	0.0036	0.40	0.0002
HEXANE PLUS	0.033	0.0145	1.70	0.0011
TOTAL	100.000	1.0363	962.17	0.6458

^{14.730} PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

^{14,730} PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR	(1/Z)	1.0020
BTU/CU.FT (DRY) CORRECTED FOR	(1/Z)	964.3
BTU/CU.FT (WET) CORRECTED FOR	(1/Z)	948.4
REAL SPECIFIC GRAVITY		0.6470

ANALYSIS RUN AT

14,730 PSIA & 60 DEGREES F

DRY BTU @ 14.650	959.0	CYLINDER #	4400
DRY BTU @ 14.896	962.1	CYLINDER # CYLINDER PRESSURE	4122 24 PSIG
DRY BTU @ 14.730	964.3	DATE RUN	6/13/2006
DRY BTU @ 15.025	983.6	ANALYSIS RUN BY	TIFFANI MONTOYA

Pogo Producing (San Juan) Company P.O. Box 10340 Midland, Texas 79702

Contact Party: Ms. Ann E. Ritchie Regulatory Agent Phone (432) 684-6381

Re: Form C-107-B (Application for Surface Commingling)
Tiger 10 CDP Gas Gathering System
E/2 of Section 27, T-30 North, R-13 West,
San Juan County, New Mexico

TO ALL INTEREST OWNERS (LIST ATTACHED)

Enclosed please find a copy of Form C-107-B that has been filed with the New Mexico Oil Conservation Division, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505. As an interest owner in the wells to be surface commingled, you are being provided a copy of this application pursuant to Division Rule No. 19.15.5.303(B)(4)(d). Any objection to the application must be filed with the Oil Conservation Division at the above address, within 20 days. If you have questions concerning this application, please contact me at (432) 684-6381.

Sincerely,

Ann E. Ritchie Regulatory Agent