11/21/07

PLC

e-mail Address

PKUR 0732528735

ABOVE THIS LINE FOR DIVISION USE O

# NEW MEXICO OIL CONSERVATION DIVISION

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



		ADMINISTRATIVE APPLICA	ATION CHECKLIST	
TH	HIS CHECKLIST IS M	ANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS WHICH REQUIRE PROCESSING AT THE DIV		AND REGULATIONS
Appli	[DHC-Dow	ns: Indard Location] [NSP-Non-Standard Prorat Inhole Commingling] [CTB-Lease Commin Info Commingling] [OLS - Off-Lease Storag [WFX-Waterflood Expansion] [PMX-Press	tion Unit] [SD-Simultaneous De gling] [PLC-Pool/Lease Comn e] [OLM-Off-Lease Measurem sure Maintenance Expansion] tion Pressure Increase]	ningling] nent]
[1]	TYPE OF AI [A]	PPLICATION - Check Those Which Apply : Location - Spacing Unit - Simultaneous Do NSL NSP SD		
	Check [B]	Cone Only for [B] or [C]  Commingling - Storage - Measurement  DHC CTB PLC PC	C  OLS  OLM	700 T
	[C]	Injection - Disposal - Pressure Increase - E  WFX PMX SWD II	•	RECE 2007 NOV 19
	[D]	Other: Specify	····	
[2]	NOTIFICAT [A]	TION REQUIRED TO: - Check Those Whice Working, Royalty or Overriding Ro		IVED
	[B]	Offset Operators, Leaseholders or Sur	face Owner	
	[C]	Application is One Which Requires Pu	ublished Legal Notice	· Share a. v. f.
	[D]	Notification and/or Concurrent App U.S. Bureau of Land Management - Commissioner of P	proval by BLM or SLO	
	[E]	For all of the above, Proof of Notifica	tion or Publication is Attached, a	nd/or,
	[F]	☐ Waivers are Attached		
[3]		CURATE AND COMPLETE INFORMATATION INDICATED ABOVE.	TION REQUIRED TO PROCE	SS THE TYPE
	val is <b>accurate</b> a	TION: I hereby certify that the information and complete to the best of my knowledge. I equired information and notifications are substituted in the complete to the best of my knowledge.	also understand that no action w	
	Note:	Statement must be completed by an individual with		
	Ritchie or Type Name	Signature Signature	Regulatory Agent / Da	10-25-07 ate
			annritchie@wtor.net	

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

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

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 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.

	ON FOR SURFACE		(DIVERSE	OWNERSHIP)	
	go Producing (San Juan) Cor	<u> </u>			
	D. Box 10340 Midland, Tex	as 79702			
APPLICATION TYPE:					
☐ Pool Commingling ☐ Lease Com	mingling Pool and Lease C	ommingling   Off-Lease	e Storage and Meas	urement (Only if not Surfa	ce Commingled)
LEASE TYPE: ■ Fee	□ State ■ Feder				
Is this an Amendment to existing					1.
Have the Bureau of Land Manag  ■ Yes □ No BLM has been no	ement (BLM) and State Land otified. Proposed commingled				ingling
		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)
Basin-Fruitland Coal Gas Pool (7162	9) 1,053	1,040		Value of production	7,140 MCF
Fulcher Kutz-Pictured Cliffs (77200)	984			will not be decreased	1,067 MCF
Basin-Dakota Gas Pool (71599)	1,025			by commingling	15,370 MCF
And the second s					
		SE COMMINGLIN			
(1) Paul Name and Cada	Please attach shee	ts with the following in	ntormation		
<ol> <li>Pool Name and Code.</li> <li>Is all production from same sou</li> </ol>	rce of supply? □ Yes □	No		8	
(3) Has all interest owners been not			□ Yes □	No	
(4) Measurement type:   Meter	ing				
	(C) POOL and	LEASE COMMIN	GLING		
	Please attach shee	ts with the following in	nformation		~
(1) Complete Sections A and E.					
	(D) OFF-LEASE ST	TORAGE and MEA	SUREMENT		
	·····	ets with the following	information		
(1) Is all production from same sou		No			
(2) Include proof of notice to all in	ieresi owners.				
	E) ADDITIONAL INFO	DRMATION (for all	application to	ypes)	
		ts with the following in		· _ /	
• •	, including legal location. Att				
<ul><li>(2) A plat with lease boundaries sh</li><li>(3) Lease Names, Lease and Well 1</li></ul>	owing all well and facility locat		ers if Federal or Sta	ite lands are involved. A	ttached
(3) Lease Maines, Lease and Well	A	······································			
I hereby certify that the information a	boye is true and complete to the	best of my knowledge and	d belief.		
SIGNATURE: MILE	elchu T	TTLE: Regulatory Age	e <u>nt</u> I	DATE: 10-25-0	7
TYPE OR PRINT NAME: Ann Ri	tchie	TELEPHON	E NO.: <u>(432) 68</u>	4-6381	<del></del>

### October 29, 2007

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 Pioneer 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 four existing gas wells located within a proposed commingled area comprising all of Section 29, Township 30 North, Range 12 West, NMPM, San Juan County, New Mexico. One well is downhole commingled in the Basin-Fruitland Coal Gas Pool (71629) and the Fulcher Kutz-Pictured Cliffs Gas Pool (77200), three wells are single completions in the Basin-Dakota Gas Pool (71599) and one well is a single completion in the Basin-Fruitland Coal Gas Pool.

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, the Fulcher Kutz-Pictured Cliffs Gas Pool or the Basin-Dakota 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 equally between 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 23,577 MCF. Of that total, 15,370 MCF is from the Basin-Dakota Gas Pool, 1,067 MCF is from the Fulcher Kutz-Pictured Cliffs Gas Pool and 7,140 MCF is from the Basin-Fruitland Coal Gas Pool.

Attachment No. 3 is a map showing the location of the wells and the associated pipelines within the proposed Pioneer CDP Gas Gathering System. The central delivery point and Enterprise Field Services gas sales meter is located within the NW/4 SE/4 of Section 20, Township 30 North, Range 12 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 is one Federal lease (Federal Lease No. NM-021122) and several fee leases 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 all three 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, Pictured Cliffs and Dakota formations are shown, respectively, as Attachments No. 6, 7 and 8.

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

W/2 Section 29 NE/4 Section 29 N/2 Section 29 E/2 Section 29 W/2 Section 29

ĕ ĕ

Fee

36.28752 -108.11801 36.78595 -108.1231

≰ ≰ Ž Ž

Fee Fee

36.77763 -108.12221 36.78668 -108.11784

Basin-Dakota Gas Pool Fulcher Kutz-Pictured Cliffs Gas Pool & Basin-Fruitland Coal Gas Pool Basin-Dakota Gas Pool Basin-Dakota Gas Pool

1450' FNL & 1850' FEL 1995' FNL & 1850' FWL

12W 12W

30N

29

ОïL

Pogo Producing (San Juan) Company 30-045-09235 Pogo Producing (San Juan) Company 30-045-33790

Pioneer Federal No. 1 Ellsworth No. 1E

300' FSL & 2140' FWL 1650' FNL & 1800' FEL

12W 12W

30N 30N

29 29

Pogo Producing (San Juan) Company 30-045-09099 Pogo Producing (San Juan) Company 30-045-29075

Well Location

Unit Letter Section Twn. Range

API Number

Current Operator

Well Name & Number

Eilsworth No. 1 Juhan No. 1

Dedicated Acreage

Lease Number

Latitude Longitude Type

Current Completion

## Pogo Producing (San Juan) Company Pioneer CDP Gas Gathering System

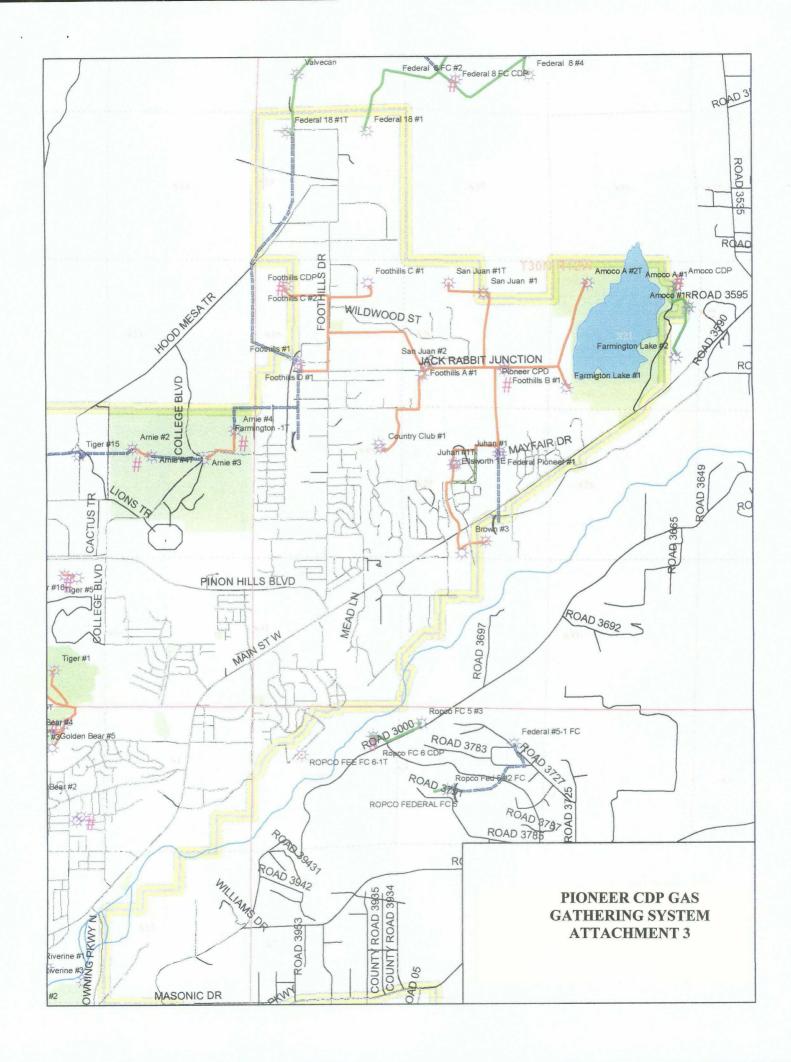
Well Name & Numbe	r, Producing Pool	Current Production (June 2007)
Ellsworth No. 1	Basin-Dakota Gas Pool	1,701 MCF
Juhan No. 1	Basin-Fruitland Coal Gas Pool	7,140 MCF
	Fulcher Kutz-Pictured Cliffs Gas Pool	1,067 MCF
Pioneer Federal No. 1	Basin-Dakota Gas Pool	1,589 MCF
Ellsworth No. 1E	Basin-Dakota Gas Pool	12,080 MCF

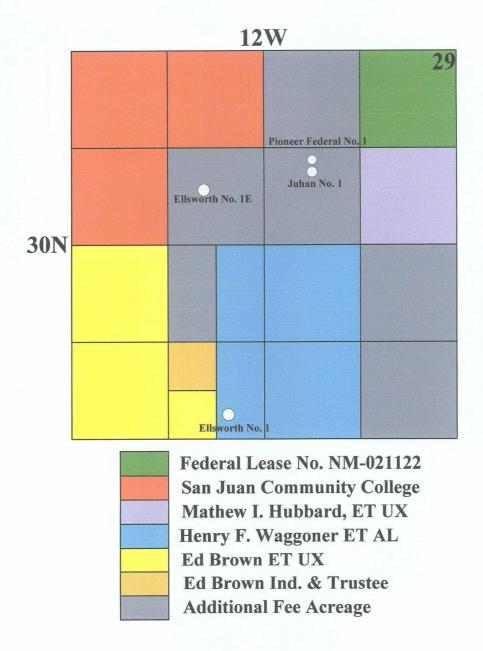
# Total Production by Pool:

Basin-Dakota Gas Pool: 15,370 MCF Fulcher Kutz-Pictured Cliffs Gas Pool: 1,067 MCF Basin-Fruitland Coal Gas Pool: 7,140 MCF

Total Production (June, 2007): 23,577 MCF

# **Attachment 2**

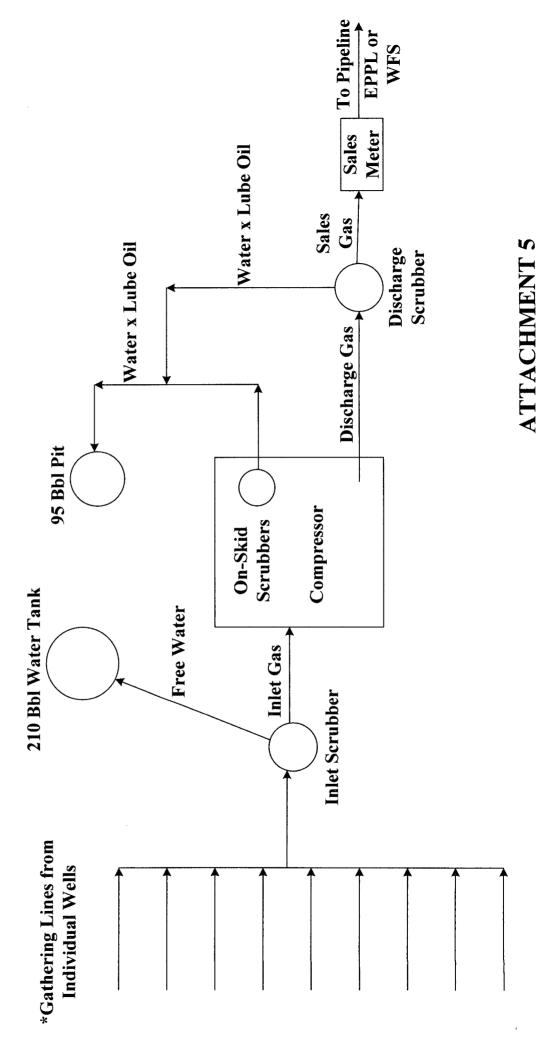




# POGO PRODUCING (SAN JUAN) COMPANY PIONEER CDP GAS GATHERING SYSTEM ATTACHMENT 4

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

(Pioneer CDP Gas Gathering System Facilities are Located in the NW/4 SE/4 of Section 20, T-30 North, Range 12 West



\*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

COUNTY/ STATE

LOCATION

FIELD

**FORMATION** CUST.STN.NO.

FRUITLAND COAL

POGO PRODUCTION

SAN JUAN FEDERAL 1-T

NM

202A357095

SAN JUAN

T8409

SOURCE PRESSURE WELLHEAD CASING

SAMPLE TEMP

48 PSI G N/A DEG.F

WELL FLOWING

DATE SAMPLED

03/14/2007

SAMPLED BY

JAMES MCGAHA

FOREMAN/ENGR.

REMARKS

ANALYSIS

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
DRY BTU @ 14.696	1,030.2
DRY BTU @ 14.730	1,032.6
DRY BTU @ 15.025	1.053.3

CYLINDER # CYLINDER PRESSURE 7005

**PSIG** 68 03/14/2007

**BRANDY ROBERTS** 

**ATTACHMENT 6** 



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

ANALYSIS NO.

PC260024

CUST. NO.

62780 - 10490

### WELL/LEASE INFORMATION

**CUSTOMER NAME** 

**COUNTY/ STATE** 

POGO PRODUCTION

ARNIE 1 (PC)

SAN JUAN

SOURCE

PRESSURE

21 P\$I G 65 DEG.F

SAMPLE TEMP **WELL FLOWING** 

Y

**FORMATION** CUST.STN.NO.

WELL NAME

LOCATION

FIELD

PICTURED CLIFFS

NM

DATE SAMPLED

6/13/2006

SAMPLED BY

FOREMAN/ENGR.

### REMARKS

A	N	8	J	Y	3	Ş
	_	_	_		_	

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
}-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 DR	/ & UNCORRECTE	D FOR COMPRESSIBILITY
----	----------------	----------------	-----------------------

\*\* @ 14,730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR 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 DRY BTU @ 14.896	959.0 962.1	CYLINDER # CYLINDER PRESSURE	4122 24 PSIG
DRY 8TU @ 14.730	964.3	DATE RUN	6/13/2006
DRY BTU @ 15.025	983.6	ANALYSIS RUN BY	TIFFANI MONTOYA



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

ANALYSIS NO.

PC260107

CUST, NO.

62780 - 10425

### WELL/LEASE INFORMATION

CUSTOMER NAME

**POGO PRODUCTION** 

SOURCE PRESSURE N/A

WELL NAME

COOLIDGE #2

COUNTY/ STATE

SAN JUAN 22-30N-14W SAMPLE TEMP

9 67

PSI G DEG.F

LOCATION

FIELD FORMATION CUST.STN.NO. NM

WELL FLOWING

DATE SAMPLED

9/23/2006 JADE SALES

1,003.34

0.5635

SAMPLED BY

FOREMAN/ENGR.

### REMARKS

TOTAL

ANALYSIS				
COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR *
NITROGEN	0.506	0.0000	0.00	0.0049
CO2	0.610	0.0000	0.00	0.0093
METHANE	98.632	0.0000	998.45	0.5464
ETHANE	0.224	0.0599	3.97	0.0023
PROPANE	0.012	0.0033	0.30	0.0002
I-BUTANE	0.004	0.0013	0.13	0.0001
N-BUTANE	0.001	0.0003	0.03	0.0000
I-PENTANE	0.009	0.0033	0.36	0.0002
N-PENTANE	0.000	0.0000	0.00	0.0000
HEXANE PLUS	0.002	0.0009	0.10	0.0001

0.0690

### 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)	1,005.4
BTU/CU.FT (WET) CORRECTED FOR	(1/Z)	988.7
REAL SPECIFIC GRAVITY		0.5644

### **ANALYSIS RUN AT**

14,730 PSIA & 60 DEGREES F

100.000

DRY BTU @ 14.650	999.9	CYLINDER#	4010
DDV DTU @ 44 COC	4 000 0	CILINDER #	4010
DRY BTU @ 14.696	1,003.0	CYLINDER PRESSURE	· 11 PSIG
DDV DTI (6) 44 720	4.005.4	0,2,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	• • • • • • • • • • • • • • • • • • • •
DRY BTU @ 14.730	1,005.4	DATE RUN	10/3/2006
DRY BTU @ 15.025	4 005 5	•••	
DAT DID @ 13.023	1,025.5	ANALYSIS RUN BY	ROSEANN MUNIZ

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)

Pioneer CDP Gas Gathering System

All of Section 29, T-30 North, R-12 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