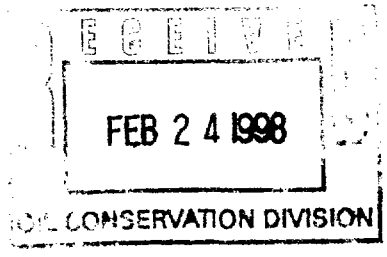
~~DHH~~ 3/16/98
QQ 608
PLC-178

PHILLIPS PETROLEUM COMPANY
FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

February 20, 1998

Re: 32-8 #1, #2, and #3 CPDs
MOGI Pump Mesa CPD
Off-Lease Measurement of Gas

State of New Mexico
Energy, Minerals & Natural Resources Dept.
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505



Attn: David Catanach

Phillips Petroleum Company respectfully requests New Mexico Oil Conservation approval for off-lease measurement/commingling of gas through the subject central points of delivery (CPDs) located in San Juan County, New Mexico. The original application was approved by the BLM on May 20, 1996 and the allocation method was approved by the OCD on February 13, 1998. A copy of the following documents are attached for your reference:

1) **Original application for the CPDs dated May 3, 1996 and approved by the BLM on May 20, 1996.**
2) **Approval of the allocation method for the CPDs by Frank Chavez of the OCD dated February 13, 1998.**
3) **Request to add the San Juan 32-8 #213 to the application dated June 5, 1997.**
4) **Request to add the San Juan 32-8 #253 to the application dated June 27, 1997**

There are a total of 51 wells connected to these CPDs.

As we discussed by phone last year, Phillips has several cases where off-lease measurement/commingling approval was obtained from the BLM without approval from the OCD in Santa Fe. This was unintentional. We did obtain approval for the allocation method on these cases from the OCD office in Aztec. It was not known at that time that additional approval was needed from the OCD in Santa Fe. I will be forwarding for approval these additional applications in the coming weeks.

If you have any questions concerning this, please call me at (505) 599-3450.

Sincerely,
Phillips Petroleum Company

Doyle Pruden
Accounting Specialist

cc: Frank Chavez-OCD Aztec, NM
Danny Jaap

PHILLIPS PETROLEUM COMPANY
FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

May 3, 1996

Bureau of Land Management
ATTN: Mr. Mike Pool
1235 La Plata Highway
Farmington, NM 87401

32-8 #1, #2, and #3 CPDs
Off-Lease Measurement of Gas

Dear Mr. Pool:

Phillips Petroleum Company requests approval for off-lease measurement/commingling of gas through the subject central points of delivery (CPDs) located in San Juan County, New Mexico. The three CPDs have been interconnected and therefore, currently should be handled as one system. Our original request for approval was submitted on August 31, 1994 and amended on October 27, 1994. Due to additional information requests and changes in our proposal, a complete new application is being submitted.

A fourth CPD (MOGI Pump Mesa CPD) is also included for approval as part of this application.

The required information for this application is attached. Phillips and Meridian are the only operators participating in these CPDs. If additional wells are proposed to be added to the system, prior approval will be obtained.

If you have any questions or if additional information is required, please contact me at 599-3460.

Sincerely,

PHILLIPS PETROLEUM COMPANY

Ed Hasely
Environmental/Regulatory Engineer

attachments
cc: Frank Chavez - OCD Aztec, NM
Sherry Richard
Meridian - Kelly Maxwell

Off Lease Measurement/Commingling Application

(32-8)

Contents:

Signature Page
General Well/CPD Schematic
Map showing wells and CPD
List of wells with Lease/Agreement Number
Description of System
Mechanical Integrity Narrative
Equipment Specifications Narrative
Equipment List
Burner Size List
Allocation Details
Fuel Gas Letter
Monthly Production Narrative
Evidence on Federal Royalties Narrative
Economic Justification
1995 Projected Gas Volumes and BTU Values
Produced Water Disposition List
Onshore Oil and Gas Order No. 5 Statement
MOGI Pump Mesa CPD
El Paso Connect

32-8 #1 CPD
32-8 #2 CPD
32-8 #3 CPD

SIGNATURE PAGE

The following are the only operators participating in the subject off-lease measurement/commingling system located in the 32-8 and 31-8 areas of San Juan County, New Mexico.

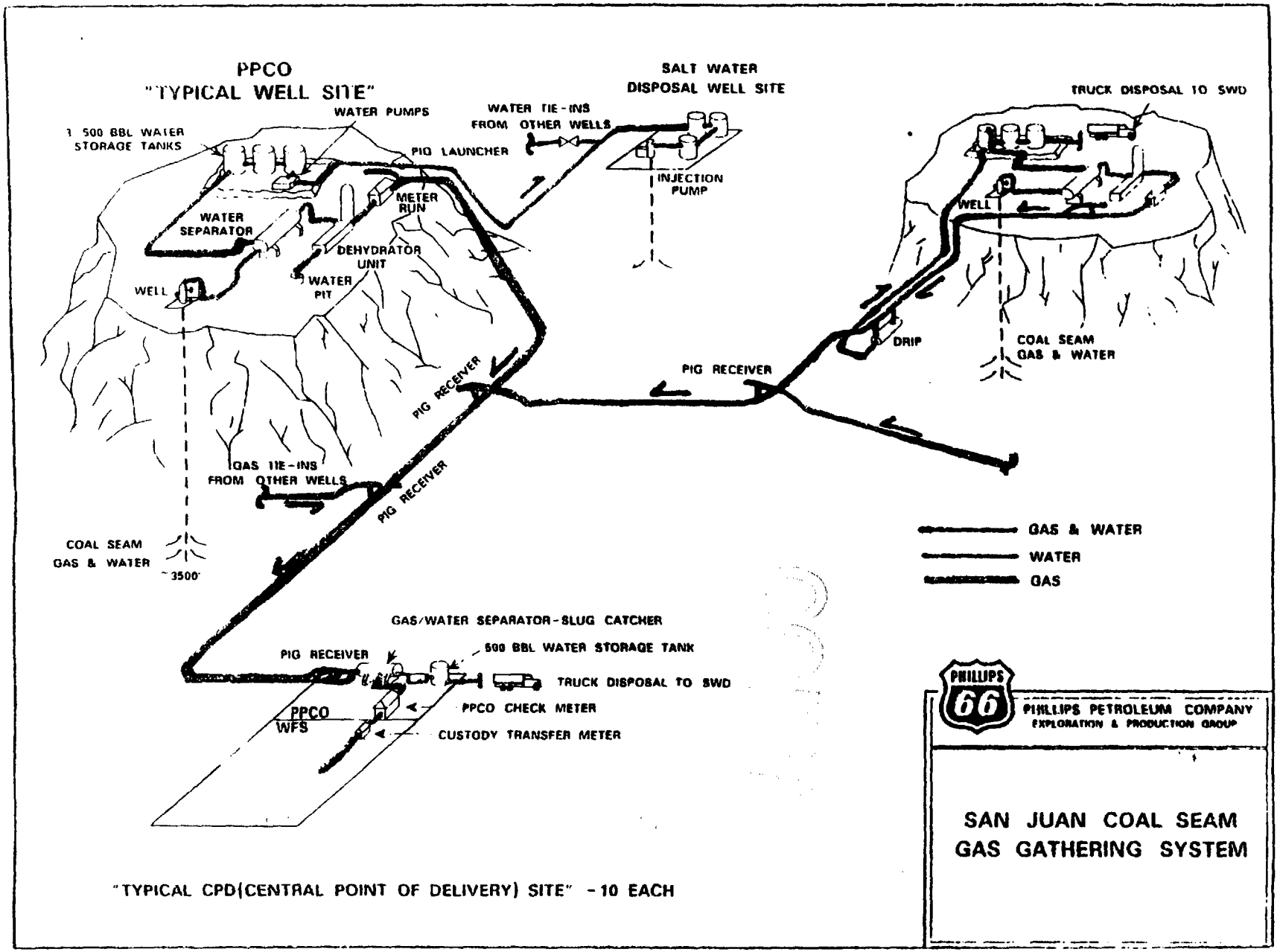
Phillips Petroleum Company

Name:	Title:	Date:
E D Hasely	Env/Regulatory Eng.	2/12/96

COP

Meridian Oil, Inc:

Name:	Title:	Date:
R.E. Muncrief	Production Superintendent	4/30/96


PPCO
"TYPICAL WELL SITE"
SALT WATER
DISPOSAL WELL SITE
TRUCK DISPOSAL TO SWD
WATER PUMPS
WATER TIE-INS
FROM OTHER WELLS
1 500 BBL WATER
STORAGE TANKS
PIG LAUNCHER
INJECTION
PUMP
METER
RUN
WATER
SEPARATOR
DEHYDRATOR
UNIT
WELL
WATER
PIT
WELL
DRIP
COAL SEAM
GAS & WATER
PIG RECEIVER
PIG RECEIVER
GAS TIE-INS
FROM OTHER WELLS
PIG RECEIVER
COAL SEAM
GAS & WATER
~3500'
GAS & WATER
WATER
GAS
GAS/WATER SEPARATOR-SLUG CATCHER
PIG RECEIVER
500 BBL WATER STORAGE TANK
TRUCK DISPOSAL TO SWD
PPCO
WFS
PPCO CHECK METER
CUSTODY TRANSFER METER
"TYPICAL CPD(CENTRAL POINT OF DELIVERY) SITE" - 10 EACH
PHILLIPS
66
PHILLIPS PETROLEUM COMPANY
EXPLORATION & PRODUCTION GROUP
SAN JUAN COAL SEAM
GAS GATHERING SYSTEM

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

UNIT	CPD LOCATION SEC	TWN	RNG	Q/Q	WELL #	CONNECT DATE	LEASE OR AGREEMENT NUMBER	CPD OWNER
CPD #2 32-8	**27**	**32N**	**8W**	**SE/NW**		**07/21/92**		**WILLIAMS FIELD SERVICE**
S. J. 32-8	27	32N	8W	SW/SW	202	07/21/92	891000446B	(30-045-27562)
S.J. 32-8	29	32N	8W	SE/SW	208	07/21/92	891000446B	(30-045-27482)
S.J. 32-8	28	32N	8W	SW/NE	230	07/21/92	891000446B	(30-045-27970)
S.J. 32-8	28	32N	8W	NW/SW	231	07/21/92	891000446B	(30-045-27971)
S.J. 32-8	29	32N	8W	SE/N E	232	07/21/92	891000446B	(30-045-27923)
S.J. 32-8	30	32N	8W	SW/NE	233	08/11/93	891000446B	(30-045-27972)
S.J. 32-8	30	32N	8W	SE/SW	239	08/11/93	891000446B	(30-045-28350)
S.J. 32-8	33	32N	8W	SW/NE	203	07/06/93	891000446B	(30-045-28720)
S.J. 32-8	34	32N	8W	NW/SW	204	07/07/93	891000446B	(30-045-28721)
S.J. 32-8	34	32N	8W	SW/NE	205	07/16/93	891000446B	(30-045-28769)
S.J. 32-8	35	32N	8W	SW/NE	218	07/12/93	891000446B	(30-045-28722)
S.J. 32-8	35	32N	8W	SE/SW	219	07/12/93	891000446B	(30-045-28723)
S.J. 32-8	3	31N	8W	SW/SW	19	11/29/93	891000446A	(30-045-11000)
S.J. 32-8	4	31N	8W	NE/NE	22	11/29/93	891000446A	(30-045-11066)
S.J. 32-8	3	31N	8W	NE/NE	39	11/29/93	891000446A	(30-045-23141)
S.J. 32-8	10	31N	8W	NW/NE	42	11/29/93	891000446A	(30-045-24468)
NON PPCO OPERATED								
State Com 31-8	2	31N	8W	SW/SW	1	11/29/93	St.NM V-100-2-NM	30-045-25040
State Com 31-8	2	31N	8W	SW/SE	1A	11/29/93	St. NM V-100-2NM	30-045-25375
State Com 31-8	2	31N	8W	SW/SW	2	06/22/94	St. NM V-100-2NM	30-045-27709

COPY

ILLEGIBLE

PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

UNIT	CPD LOCATION SEC	TWN	RNG	Q/Q	WELL #	CONNECT DATE	LEASE OR AGREEMENT NUMBER	CPD OWNER
CPD #1 32-8	**14**	**31N**	**8W**	**S/SE**		**08/07/92**		**WILLIAMS FIELD SERVICE**
BLANCO	35	31N	8W	NW/SW	201	08/07/92	NMNM012641	(30-045-27446)
BLANCO	26	31N	8W	SW/NE	202	08/07/92	NMNM012641	(30-045-27968)
BLANCO	35	31N	8W	NE/NE	203	08/07/92	NMNM012641	(30-045-27919)
BLANCO	26	31N	8W	SW/SW	204R	01/22/93	NMNM012641	(30-045-28776)
S.J. 32-8	22	31N	8W	SE/SW	207	09/29/92	891000446B	(30-045-27447)
S.J. 32-8	24	31N	8W	NW/SW	220	08/12/92	891000446B	(30-045-28223)
S.J. 32-8	22	31N	8W	SE/NE	236	08/14/92	891000446B	(30-045-28416)
S.J. 32-8	23	31N	8W	SW/NE	237	08/07/92	891000446B	(30-045-28209)
S.J. 32-8	23	31N	8W	SE/SW	238	08/07/92	891000446B	(30-045-28132)
S.J. 32-8	14	31N	8W	SW/NE	244*	02/02/93	891000446B	(30-045-28321)
S.J. 32-8	14	31N	8W	NW/SW	245*	10/30/92	891000446B	(30-045-28322)
S.J. 32-7	18	31N	8W	NE/SW	227 COM	08/07/92	NMNM87134	(30-045-28364)
S.J. 32-8	24	31N	8W	SW/NE	206	09/09/92	891000446B	(30-045-28251)

* Wells (32-8 #244 & #245) are hooked up such that the gas flow can either be directed to the MOGI Pump Mesa CPD or into the pipeline system associated with WFS's CPDs.

PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

UNIT	CPD LOCATION SEC	TWN	RNG	Q/Q	WELL #	CONNECT DATE	LEASE OR AGREEMENT NUMBER	CPD OWNER
CPD #3 32-8	**9**	**31N**	**8W**	**E/NE**		**09/15/92**		**WILLIAMS FIELD SERVICE**
S. J. 32-8	9	31N	8W	SW/SW	221	06/04/93	891000446B	(30-045-27920)
S.J. 32-8	9	31N	8W	NE/NE	222	06/04/93	891000446B	(30-045-27921)
S.J. 32-8	10	31N	8W	SE/SW	223	02/23/93	891000446B	(30-045-27869)
S.J. 32-8	10	31N	8W	NW/NE	224	09/15/92	891000446B	(30-045-27867)
S.J. 32-8	15	31N	8W	SW/SW	225	11/04/92	891000446B	(30-045-28017)
S.J. 32-8	15	31N	8W	NE/NE	226	02/10/93	891000446B	(30-045-27868)
S.J. 32-8	16	31N	8W	NW/SW	227	02/05/93	891000446B	(30-045-27776)
S.J. 32-8	16	31N	8W	SW/NE	228	11/20/92	891000446B	(30-045-27771)
S.J. 32-8	21	31N	8W	SW/SW	234*	05/21/93	891000446B	(30-045-28324)
S.J. 32-8	21	31N	8W	SW/NE	235	09/15/92	891000446B	(30-045-28223)
S.J. 32-8	3	31N	8W	NE/SW	240	09/15/92	891000446B	(30-045-28274)
S.J. 32-8	4	31N	8W	NE/NE	241	09/15/92	891000446B	(30-045-28275)
S.J. 32-8	4	31N	8W	SW/SW	242	11/02/92	891000446B	(30-045-28415)
S.J. 32-8	11	31N	8W	SW/SW	243	02/26/93	891000446B	(30-045-28276)
S.J. 32-8	11	31N	8W	SW/NE	248	02/26/93	891000446B	(30-045-28349)
S.J. 32-8	3	31N	8W	NE/NE	249	06/30/93	NMSF079029	(30-045-28306)
S.J. 32-8	33	31N	8W	SW/SW	250	09/15/92	891000446B	(30-045-28307)

* Well (32-8 #234) is hooked up such that the gas flow can either be directed into El Paso's line or into the pipeline system associated with WFS's CPDs.

COPY

Description of System - 32-8

Fruitland Coal and conventional gas wells, operated by Phillips Petroleum, are tied into a gathering system. Three gas wells operated by Meridian are also tied into the same gathering system. The gathering system delivers gas to three Central Points of Delivery (CPDs) which are operated by Williams Field Service (WFS). A CPD is the point of interconnection on WFS's Manzanares System where WFS receives gas for gathering. (See Attached Map) The three 32-8 CPDs have been interconnected and therefore, should be handled as one system.

Each of the Phillips operated Fruitland Coal wells is equipped with a separator, a dehydrator and an electronic flow gas meter. Some wells may also have a small compressor on location. The gas is produced through the separator to remove excess water. The water is stored in water storage tanks on location prior to disposal. The gas is further dried by the dehydrator prior to measurement. Fuel gas required to operate the well equipment (separator, dehydrator, compressors and tank heaters) is taken from the dehydrator prior to measurement. The gas leaving the well location is measured through Phillips Petroleum's electronic flow meter.

Each of the Phillips operated conventional gas wells that are tied into this system is equipped with a dehydrator and an orifice meter. Since these wells make little to no water, a separator is not required and the dehydrator sufficiently dries the gas prior to measurement. As with the Fruitland Coal wells, all fuel gas required to operate equipment is taken prior to measurement.

After the gas is measured at the individual well locations, the combined gas enters the gathering system. The gathering system delivers the gas to the CPDs.

At the CPDs, the gas enters a gas/water separator which separates any free water that drops out in the pipeline. Since all the gas flows through dehydrators on individual well locations prior to entering the gathering system, this water volume is normally negligible. The gas then goes through Phillips Petroleum's check meter (electronic flow meter) and directly through WFS's CPD meter. WFS compresses the gas downstream of the CPD meters. No gas is removed for fuel between the allocation gas meters on the individual wells and the CPD meter.

Mechanical Integrity

All Phillips owned lines downstream of the meter runs on the individual well locations to the CPDs have been pressure tested with either water or nitrogen to 750 psi and held for a minimum of 4 hours.

Phillips does not have records concerning pressure testing of the WFS owned lines (Trunk P, lines from PPCo's four conventional wells, and lines from Meridian's wells).

Equipment Specifications

A sheet is attached that lists the size and make of all fuel burning equipment on each Phillips Petroleum well location. A separate sheet details the burner size for each type of equipment. The equipment list is subject to change as operational needs vary over time. Equipment changes will be reflected in our fuel gas calculations.

PHILLIPS PETROLEUM COMPANY

WELL NUMBER	PROD SEP MFG	SIZE	DEHY MFG	SIZE	TANK #1 MFG	TANK #2 MFG	TANK #3 MFG	RENTAL COMP. HP
CPD #1 32-8								
32-7 #227 COM	ENERTEK	4MM	ENERTEK	4MM	WESTERN	WESTERN	WESTERN	
32-8 #206	PESCO	4MM	PESCO	4MM	PESCO	PESCO	PERMIAN	
32-8 #207	P&A	6MM	P&A	6MM	WESTERN	WESTERN	WESTERN	
32-8 #220	P&A	4MM	P&A	4MM	PALMER	PALMER	PALMER	
32-8 #236	PESCO	6MM	PESCO	6MM	PESCO	PESCO	PERMIAN	
32-8 #237	PESCO	6MM	PESCO	6MM	PERMIAN	PERMIAN	PERMIAN	
32-8 #238	PESCO	4MM	PESCO	4MM	PERMIAN	PERMIAN	PERMIAN	
32-8 #244	P&A	6MM	P&A	6MM	PESCO	PERMIAN	PERMIAN	
32-8 #245	PESCO	6MM	PESCO	6MM	PALMER	PALMER	PALMER	
Blanco #201	P&A	4MM	P&A	4MM	WESTERN	WESTERN	WESTERN	
Blanco #202	P&A	6MM	P&A	6MM	PERMIAN	PERMIAN	PERMIAN	
Blanco #203	P&A	6MM	P&A	6MM	PERMIAN	PERMIAN	PERMIAN	
Blanco #204R	PESCO	6MM	PESCO	6MM	PERMIAN	PERMIAN	PERMIAN	
			ENERTEK	4MM				

PHILLIPS PETROLEUM COMPANY

WELL NUMBER	PROD SEP MFG	SIZE	DEHY MFG	SIZE	TANK #1 MFG	TANK #2 MFG	TANK #3 MFG	RENTAL COMP. HP
CPD #2 32-8								
32-8 #19				2 MM				
32-8 #22				2 MM				
32-8 #39				2 MM				
32-8 #42				2 MM				
32-8 #202	PESCO	2 MM	PESCO	2 MM	PERMIAN	PERMIAN	PERMIAN	
32-8 #203	PESCO	2 MM	PESCO	2 MM	PERMIAN	PERMIAN	PERMIAN	
32-8 #204	PESCO	2 MM	PESCO	2 MM	PESCO	PESCO	PESCO	
32-8 #205	PESCO	2 MM	PESCO	2 MM	PERMIAN	PERMIAN	PERMIAN	
32-8 #208	P&A	2 MM	P&A	2 MM	WESTERN	WESTERN	PALMER	
32-8 #218	P&A	2 MM	P&A	2 MM	PESCO	PESCO	PESCO	
32-8 #219	PESCO	4 MM	PESCO	4 MM	PERMIAN	PERMIAN	PERMIAN	
32-8 #230	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	
3208 #231	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	
32-8 #232	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	
32-8 #233	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	
32-8 #239	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	
NON PPCO OPERATED								
31-8 #1	PESCO	2MM	Salt	2MM				
31-8 #1A	P&A	2MM	P&A	2MM				
31-8 #2	PESCO	2MM	P&A	2MM	PERMIAN	PERMIAN	PERMIAN	

PHILLIPS PETROLEUM COMPANY

WELL NUMBER	PROD SEP MFG	SIZE	DEHY MFG	SIZE	TANK #1 MFG	TANK #2 MFG	TANK #3 MFG	RENTAL COMP. HP
CPD #3 32-8								
32-8 #221	PESCO	4 MM	PESCO	4 MM	PERMIAN	PERMIAN	PERMIAN	
32-8 #222	PESCO	2 MM	PESCO	2 MM	PERMIAN	PERMIAN	PERMIAN	
32-8 #223	PESCO	2 MM	PESCO	2 MM	PERMIAN	PERMIAN	PERMIAN	
32-8 #224	PESCO	2 MM	PESCO	2 MM	PERMIAN	PERMIAN	PERMIAN	
32-8 #225	PESCO	6 MM	PESCO	6 MM	PALMER	PALMER	PALMER	
32-8 #226	PESCO	4 MM	PESCO	4 MM	PALMER	PALMER	PALMER	
32-8 #227	PESCO	6 MM	PESCO	6 MM	PESCO	PALMER	PALMER	
32-8 #228	PESCO	4 MM	PESCO	4 MM	PALMER	PALMER	PALMER	
32-8 #234	PESCO	6 MM	PESCO	6 MM	PESCO	PESCO	PALMER	
32-8 #235	PESCO	4 MM	PESCO	4 MM	PESCO	WESTERN	PERMIAN	
32-8 #240	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	
32-8 #241	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	
32-8 #242	PESCO	4 MM	PESCO	4 MM	PALMER	PALMER	PALMER	
32-8 #243	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	
32-8 #248	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	
32-8 #249	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	
32-8 #250	P&A	2 MM	P&A	2 MM	PALMER	PALMER	PALMER	

BURNER SIZES

	Size (MMCF/D)	Manufacturer	Burner Size (BTU/HR)
Separators			
	2	P&A	250,000
	2	Pesco	250,000
	2	Enertek	250,000
	4	P&A	400,000
	4	Pesco	400,000
	4	Enertek	400,000
	4	American Tank	400,000
	6	P&A	450,000
	6	Pesco	450,000
Dehydrators			
	2	P&A	150,000
	2	Pesco	125,000
	4	P&A	250,000
	4	Pesco	125,000
	4	Enertek	250,000
	6	P&A	350,000
	6	Pesco	200,000
Tank Heaters			
	N/A	All	350,000

ALLOCATION DETAILS

(32-8 System)

Basically, the gas sales volume (mcf) will be allocated on a volume basis and the gas sales MMBTUs will be allocated on an MMBTU basis.

The gas sales volume (mcf) from an individual well is determined by first calculating a ratio by dividing its metered volume (mcf) by the sum of the metered volumes (mcf) of all wells connected to the three CPDs. This ratio is then multiplied by the total of the three CPD volumes (mcf) to determine the allocated sales volume. The gas production volume for an individual well is determined by adding the well's estimated fuel gas volume and the "Flared or Vented" gas volume to the well's allocated sales volume.

The fuel gas volumes are based upon the type and size of equipment on each well location and the number of producing days for each well. The fuel gas usage for the equipment was detailed in Phillips Petroleum's August 17, 1994 letter addressed to Mr. Mike Pool (attached).

The MMBTUs assigned to an individual well is determined by first calculating a ratio by dividing its metered MMBTUs by the sum of the metered MMBTUs of all wells connected to the three CPDs. This ratio is then multiplied by the total of the three CPD MMBTUs. The individual well BTU value (MMBTU/mcf) will be calculated by dividing the allocated MMBTUs by the allocated volume (mcf).

If a section of line is blown down, the calculated volume of blowdown gas will be allocated to the affected wells. This allocated blowdown volume will be reported as "Flared or Vented" gas.

Since all the gas flows through dehydrators on individual well locations prior to entering the gathering system, water volumes at the CPD are normally negligible. If these water volumes become significant, they will be allocated to the wells.

For the three wells that are not Phillips operated, Phillips calculates the allocated gas sales volumes (mcf) and MMBTUs in the manner described above. Phillips then gives this information to WFS so it can be passed on to the operator (Meridian).

PHILLIPS PETROLEUM COMPANY
FARMINGTON, NEW MEXICO 87401
5525 HWY 64 NBU 3004

August 17, 1994

Bureau of Land Management
1235 La Plata Hwy.
Farmington, NM 87041
Attn: Mike Pool

Gas Used on Lease As Reported
On Form MMS-3160 (Monthly
Report of Operations)

Dear Mr. Pool:

It has been brought to our attention that there are volume discrepancies between gas used on lease as reported by Phillips Petroleum Company on Form MMS-3160 and gas used on lease as calculated by Mike Wade of your office. This was found during the recent Production Accountability Inspections conducted by Mike Wade. The most notable volume discrepancy is the gas used by water tank heaters on our coal seam wells. We have not been calculating or reporting any gas used on lease volumes for these tank heaters.

I am proposing that effective with August 1994 production, Phillips Petroleum Company report gas used on lease based on the attached table for all leases that we operate in the area that your office administers. I would also like to recommend for your approval that we not be required to make retroactive corrections prior to August 1994 for gas used on lease as reported on the Form MMS-3160. The reasoning behind this request is the manpower involved for both Phillips Petroleum Company and the federal agencies to process these corrections, the relatively small gas volumes as compared to the produced volumes, and the fact that volumes are not royalty bearing.

Please let me know your decision concerning this as early as possible to allow our Production Accounting personnel time to make adjustments prior to August's production reports. My phone number is 599-3460 if you would like to discuss.

Sincerely,

PHILLIPS PETROLEUM COMPANY

Ed Hasely
Environmental/Regulatory Engineer

cc: J. W. Taylor
E. D. Pruden

kh\mms3160.gas

FUEL USE EQUIPMENT

(All factors at 15.025 Pressure Base)

SEPARATORS	≤ 2 MM	-	4.3	mcf/producing day
	4 MM	-	6.9	mcf/producing day
	6 MM	-	7.7	mcf/producing day
DEHYDRATORS	≤ 2 MM	-	2.4	mcf/producing day
	4 MM	-	3.2	mcf/producing day
	6 MM	-	4.7	mcf/producing day
	10 MM	-	6.0	mcf/producing day
TANK HEATERS		-	1.8	mcf/producing day/tank

Note: Anticipate tank heaters to operate from November through March, but this may vary year to year.

COMPRESSORS	50 HP	-	8	mcf/producing day
	80 HP	-	13	mcf/producing day
	100 HP	-	16	mcf/producing day
	120 HP	-	19	mcf/producing day
	165 HP	-	26	mcf/producing day

BLOWDOWN GAS

Fruitland Sand & Mesaverde - 0.7 mcf/minute of blowdown

Dakota - 1.0 mcf/minute of blowdown

Estimate of Blowdown Volume

Dakota Formation

Assumptions: Ideal Gas Law ($z = 1$)
$2\frac{3}{8}$" Tubing at 7200 ft
Pressure = 350 psig
Temperature = Constant 60°
Two Tubing Volumes for Blowdown
Average Blowdown = 8 minutes

$P_1 V_1 = P_{sc} V_{sc}$

$P_1 = 364$ psia
$P_{sc} = 14.7$ psia
$V_1 = 2(7200')(.0217\ ft^3/ft)$
$= 312\ ft^3$

$V_{sc} = \left(\frac{364}{14.7}\right)(312) = 7726\ ft^3 \approx 7.7$ MCF

7.7 MCF in 8 minutes $\approx$ **1 MCF/Min**

Dakota Formation = 1.0 MCF/Min

LEH
3/16/95

Estimate of Blowdown Volumes
Mesa Verde & Fruitland Sand Formations

Assumptions: Ideal Gas Law ($Z = 1$)
2 3/8" Tubing at 6000 ft.
Pressure = 300 psig
Temperature = Constant 60°
Two Tubing Volumes for Blowdown
Averge Blowdown = 8 minutes

$P_i V_1 = P_{sc} V_{sc}$ $\quad P_i = 314$ psia

$P_{sc} = 14.7$ psia

$V_1 = 2(6000')(.0217\ ^{ft^3}/_{ft})$

$= 260\ ft^3$

$V_{sc} = \left(\frac{314}{14.7}\right)(260) = 5554\ ft^3 \approx 5.6$ MCF

5.6 MCF in 8 minutes = **0.7 MCF/Min** ✓

Mesa Verde & Fruitland Sand = 0.7 MCF/Min

COPY

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3/16/95

Monthly Production

Sheets are attached that show the 1995 production and BTU Content of the gas for each of the Phillips' Operated wells connected to the CPD.

Evidence on Federal Royalties

Gas volumes and MMBTU quantities are allocated to the wells from the CPD because the most accurate volumes and MMBTU quantities available are from the CPD. The reasons for this, such as measurement errors, stable flow rates, BTU content, etc., have been discussed on numerous occasions. The inherently greater accuracy of the CPD volume, as compared to the sum of the individual well metered volumes, warrants the acceptance of the CPD volume as representative of the total sales volume from the individual wells. It is then necessary only to reduce the total sales volume to its individual components through the proposed allocation method.

As described under the "Allocation Details" section, allocation of gas sales (MMBTUs) to individual wells is performed on an MMBTU basis. In this manner, any BTU difference in gas from individual wells is accounted for. Following this method allows Federal royalties to be calculated from the most accurate volumes.

Economic Justification

The CPD system utilizing off-lease gas measurement will extend the economic life of all affected wells due to the reduction of back pressure on the wells. Without the system, the gas would have been produced into a conventional gas pipeline operated at a substantially higher pressure. The higher pipeline pressure would decrease the recoverable reserves from each well or force Phillips to install compressors on each well location. Either scenario will reduce the economic life of the wells.

1995 PRODUCTION VOLUMES

cpd95pdt.wk4

Volume & BTU @ 15.025 #

CPD NUMBER	UNIT	WELL	YEARLY MCF	Dec. 1995 BTU Value
32-8 #1,2 & 3 CPD	Blanco	201	1,161,786	0.9058
	Blanco	202	971,707	0.9078
	Blanco	203	990,331	0.8929
	Blanco	204 R	1,682,835	0.9058
	S.J. 32-7	227	1,069,468	0.9457
	S.J. 32-8	19	16,145	1.0368
	S.J. 32-8	22	0	1.0000
	S.J. 32-8	39	36,736	1.0283
	S.J. 32-8	42	27,434	1.0318
	S.J. 32-8	202	388,436	0.9627
	S.J. 32-8	203	282,019	0.9517
	S.J. 32-8	204	258,697	0.9508
	S.J. 32-8	205	150,406	0.9528
	S.J. 32-8	206	477,512	0.9029
	S.J. 32-8	207	2,963,886	0.8959
	S.J. 32-8	208	310,671	0.9128
	S.J. 32-8	218	102,722	0.9947
	S.J. 32-8	219	227,821	0.9677
	S.J. 32-8	220	934,026	0.9008
	S.J. 32-8	221	1,412,430	0.9208
	S.J. 32-8	222	309,474	0.9328
	S.J. 32-8	223	599,441	0.9308
	S.J. 32-8	224	141,864	0.9388
	S.J. 32-8	225	2,054,620	0.9188
	S.J. 32-8	226	886,566	0.9308
	S.J. 32-8	227	2,064,114	0.9128
	S.J. 32-8	228	667,978	0.9258
	S.J. 32-8	230	303,945	0.9527
	S.J. 32-8	231	240,464	0.9258
	S.J. 32-8	232	199,625	0.9308
	S.J. 32-8	233	541,864	0.9408
	S.J. 32-8	234	2,134,386	0.9168
	S.J. 32-8	235	1,878,465	0.9038
	S.J. 32-8	236	2,106,551	0.9168
	S.J. 32-8	237	1,477,981	0.9088

1995 PRODUCTION VOLUMES

cpd95pdt.wk4

Volume & BTU @ 15.025 #

CPD NUMBER	UNIT	WELL	YEARLY MCF	Dec. 1995 BTU Value
	S.J. 32-8	238	1,920,976	0.9098
	S.J. 32-8	239	619,138	0.9427
	S.J. 32-8	240	336,651	0.9338
	S.J. 32-8	241	353,911	0.9447
	S.J. 32-8	242	497,598	0.9597
	S.J. 32-8	243	334,153	0.9318
	S.J. 32-8	244	2,396,493	0.9288
	S.J. 32-8	245	2,343,717	0.9198
	S.J. 32-8	248	118,822	0.9477
	S.J. 32-8	249	46,824	0.9427
	S.J. 32-8	250	524,672	0.9348
		TOTAL	***38,040,689***	

Note: The three conventional wells that are non-PPCo operated are not included.

PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

UNIT	WELL #	PIPELINE WATER	TRUCKED WATER	SWD LOCATION
CPD #1 32-8				
BLANCO	201	X		BLACKWOOD/NICHOLS SWD
BLANCO	202	X		BLACKWOOD/NICHOLS SWD
BLANCO	203	X		BLACKWOOD/NICHOLS SWD
BLANCO	204R	X		BLACKWOOD/NICHOLS SWD
S.J. 32-8	207	X		32-8 SWD
S.J. 32-8	220	X		32-8 SWD
S.J. 32-8	236	X		32-8 SWD
S.J. 32-8	237	X		32-8 SWD
S.J. 32-8	238	X		32-8 SWD
S.J. 32-8	244	X		32-8 SWD
S.J. 32-8	245	X		32-8 SWD
S.J. 32-7	227 COM		X	BLACKWOOD/NICHOLS SWD
S.J. 32-8	206	X		32-8 SWD

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PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

UNIT	WELL #	PIPELINE WATER	TRUCKED WATER	SWD LOCATION
CPD #2 32-8				
S. J. 32-8	202	X		32-8 SWD
S.J. 32-8	208	X		32-8 SWD
S.J. 32-8	230	X		32-8 SWD
S.J. 32-8	231	X		32-8 SWD
S.J. 32-8	232	X		32-8 SWD
S.J. 32-8	233	X		32-8 SWD
S.J. 32-8	239	X		32-8 SWD
S.J. 32-8	203	X		32-8 SWD
S.J. 32-8	204	X		32-8 SWD
S.J. 32-8	205	X		32-8 SWD
S.J. 32-8	218	X		32-8 SWD
S.J. 32-8	219	X		32-8 SWD
S.J. 32-8	19		X	COMMERCIAL DISPOSAL
S.J. 32-8	22		X	COMMERCIAL DISPOSAL
S.J. 32-8	39		X	COMMERCIAL DISPOSAL
S.J. 32-8	42		X	COMMERCIAL DISPOSAL
NON PPCO OPERATED				
State Com 31-8	1		X	McGRATH 4 SWD
State Com 31-8	1A		X	McGRATH 4 SWD
State Com 31-8	2		X	PUMP CANYON SWD

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PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

UNIT	WELL #	PIPELINE WATER	TRUCKED WATER	SWD LOCATION
CPD #3 32-8				
S. J. 32-8	221	X		32-8 SWD
S.J. 32-8	222	X		32-8 SWD
S.J. 32-8	223	X		32-8 SWD
S.J. 32-8	224	X		32-8 SWD
S.J. 32-8	225	X		32-8 SWD
S.J. 32-8	226	X		32-8 SWD
S.J. 32-8	227	X		32-8 SWD
S.J. 32-8	228	X		32-8 SWD
S.J. 32-8	234*	X		32-8 SWD
S.J. 32-8	235	X		32-8 SWD
S.J. 32-8	240	X		32-8 SWD
S.J. 32-8	241	X		32-8 SWD
S.J. 32-8	242	X		32-8 SWD
S.J. 32-8	243	X		32-8 SWD
S.J. 32-8	248	X		32-8 SWD
S.J. 32-8	249	X		32-8 SWD
S.J. 32-8	250	X		32-8 SWD

October 19, 1994

PHILLIPS PETROLEUM COMPANY
San Juan Basin, New Mexico
Off-Lease Measurement of Gas Applications

STATEMENT: The allocation meters are calibrated and gas samples are collected in accordance with Onshore Oil and Gas Order No. 5.

MOGI Pump Mesa CPD - (32-8 #244 & #245)

A fourth custody transfer point (CPD) located in the SE of Section 14-T31N-R8W is shown on the attached map. Meridian is the operator of this MOGI Pump Mesa CPD.

Phillips Petroleum's 32-8 #244 and #245 wells (PA wells) are connected to both the MOGI Pump Mesa CPD and the PPCo/WFS system. Valves can be manually operated to direct our gas to either MOGI or WFS, not both at the same time.

If the gas is sent to MOGI, it goes through a custoday transfer meter located at the CPD. The two Phillips wells are the only wells going through this meter, so the volume (MCF & MMBTU) is allocated back to the two wells using the same allocation formulas as described in this application.

If the gas from the two wells is sent to WFS, the wells are included in the total allocation for the three 32-8 CPDs.

El Paso Connect - (32-8 #234)

Phillips Petroleum's 32-8 #234 is hooked up to both the El Paso pipeline and the PPCo/WFS system. Valves can be manually operated to direct our gas to either El Paso or WFS, but not both at the same time. If the gas goes to El Paso, it passes through El Paso's custody transfer meter on location. If the gas is sent to WFS, the well is included in the total allocation for the three 32-8 CPDs.

leh\mogicpd.app

PY

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
AZTEC NM 87410
(505) 334-6178 FAX: (505) 334-6170
http:\\emnrd.state.nm.us/ocd/District III/3distric.htm

GARY E. JOHNSON
GOVERNOR

Jennifer A. Salisbury
CABINET SECRETARY

February 13, 1998

COPY

Doyle Pruden
Phillips Pet Co
5525 Hwy 64 NBU 3004
Farmington NM 87401

Re: Aztec CPD
San Juan 29-6 CPD #1 and #2
32-8 CPD #1, #2, and #3

Dear Doyle:

Your recommended allocation procedures for the listed CPD's are hereby approved.

Sincerely,

Frank T. Chavez
District Supervisor

FTC\sh

PHILLIPS PETROLEUM COMPANY
FARMINGTON, NEW MEXICO 87401
5525 HWY 64 NBU 3004

June 5, 1997

Bureau of Land Management
Attn: Duane Spencer
1235 La Plata Hwy.
Farmington, NM 87401

New Mexico Oil & Gas Conservation
Attn: Frank Chavez
1000 Rio Brazos Rd.
Aztec, NM 87410

32-8 #1, #2, and #3 CPDs
Off-Lease Measurement of Gas
Addition of San Juan 32-8 #213
(30-045-29451)

Gentlemen:

Phillips Petroleum Company requests approval to add the San Juan 32-8 #213 to the off-lease measurement/commingling application for the subject CPDs. The original application was approved by the BLM on May 20, 1996. Mr. Chavez, I cannot find in the file an approval letter from the NMOCD and respectfully request a copy to be mailed. If additional information is needed, please let me know.

This well is located in Unit N, 908' FSL & 1759' FWL, Section 22, T32N, and R8W. The federal lease number is NMSF079380. The well will be connected to 32-8 #2 CPD. As the original approved application states, these three CPDs have been interconnected and therefore are handled as one system.

A gas line is currently being laid to the well and we expect first production to the CPDs during the latter part of the week of June 9th. Phillips Petroleum Company will follow Onshore Oil and Gas Order #5 and the allocation procedures outlined in the original approved application in regards to gas production from this well.

If you have any questions concerning this well addition, please call me at 599-3450.

Sincerely,

COPY

Phillips Petroleum Company
Doyle Pruden
Doyle Pruden
Accounting Specialist

cc: Burlington Resources Inc.- Kelly Maxwell
Sherry Richard

PHILLIPS PETROLEUM COMPANY
FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

June 27, 1997

Bureau of Land Management
Attn: Duane Spencer
1235 La Plata Hwy.
Farmington, NM 87401

New Mexico Oil & Gas Conservation
Attn: Frank Chavez
1000 Rio Brazos Rd.
Aztec, NM 87410

32-8 #1, #2, and #3 CPDs
Off-Lease Measurement of Gas
Addition of San Juan 32-8 #253
(30-045-29460)

Gentlemen:

Phillips Petroleum Company requests approval to add the San Juan 32-8 #253 to the off-lease measurement/commingling application for the subject CPDs. The original application was approved by the BLM on May 20, 1996. Mr. Chavez, I cannot find in the file an approval letter from the NMOCD and respectfully request a copy to be mailed. If additional information is needed, please let me know.

This well is located in Unit G, 1824' FNL & 1757' FEL, Section 27, T32N, and R8W. The federal lease number is NMSF080412A. The well will be connected to 32-8 #2 CPD. As the original approved application states, these three CPDs have been interconnected and therefore are handled as one system.

A gas line is currently being laid to the well and we expect first production to the CPDs mid July. Phillips Petroleum Company will follow Onshore Oil and Gas Order #5 and the allocation procedures outlined in the original approved application in regards to gas production from this well.

If you have any questions concerning this well addition, please call me at 599-3450.

COPY

Sincerely,

Phillips Petroleum Company

Doyle Pruden
Accounting Specialist

cc: Burlington Resources Inc.- Kelly Maxwell
Sherry Richard

PHILLIPS PETROLEUM COMPANY
FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

AUG 2 4 1999

August 17, 1999

Bureau of Land Management
Attn: Errol Becher
1235 La Plata Hwy.
Farmington, NM 87401

New Mexico Oil & Gas Conservation
Attn: Frank Chavez
1000 Rio Brazos Rd.
Aztec, NM 87410

State of New Mexico
Attn: David Catanach
Energy, Minerals & Natural Resources Dept.
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

32-8 #1, #2 and #3 CPDs
Off-Lease Measurement of Gas
Addition of U-Da-Well #1
(30-045-29906)

Gentlemen:

Phillips Petroleum Company requests approval to add the U-Da-Well #1 operated by Merrion Oil & Gas Corp. to the off-lease measurement/commingling application for the subject CPDs. The original application was approved by the BLM on May 20, 1996. The application dated February 20, 1998 to David Catanach is still waiting for approval.

The U-Da-Well #1 is located in Unit F, 1500' FNL & 1445' FWL, Section 2, T31N, R8W. This well is on a state lease. As the original application states, these three CPDs have been interconnected and therefore are handled as one system.

First production to the CPDs from the U-Da-Well #1 was August 4, 1999. Phillips Petroleum Company will follow Onshore Oil & Gas Order #5 and the allocation procedures outlined in the original approved application in regards to gas production from this well.

If you have any questions concerning this well addition, please call me at 599-3450.

Sincerely,

PHILLIPS PETROLEUM COMPANY

Doyle Pruden
Accounting Specialist

cc: Danny Jaap
Burlington Resources Inc. - Kelly Maxwell
Merrion Oil & Gas Corp. - George Sharp