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OIL CONS. DIV DIST. 3 **BURLINGTON**  
OCT 01 2015 **RESOURCES**

Farmington Field Office  
Bureau of Land Management

Distribution:  
BLM 4 Copies  
Regulatory  
Accounting  
Well File  
Revised: March 9, 2006

**PRODUCTION ALLOCATION FORM**

Status  
PRELIMINARY ☐  
FINAL ☐  
REVISED ☒ 3<sup>RD</sup>

Commingle Type  
SURFACE ☐ DOWNHOLE ☒  
Type of Completion  
NEW DRILL ☒ RECOMPLETION ☐ PAYADD ☐ COMMINGLE ☐

Date: 9/11/2015

API No. 30-045-35544  
DHC No. DHC3894AZ  
Lease No. SF-078487C

Well Name  
**Sunray**

Well No.  
#1M

Unit Letter	Section	Township	Range	Footage
Surf- A	5	T029N	R008W	999' FNL & 699' FEL
BH- H	5	T029N	R008W	1957' FNL & 705' FEL

County, State  
**San Juan County,  
New Mexico**

Completion Date  
**1/19/15**

Test Method  
HISTORICAL ☐ FIELD TEST ☒ PROJECTED ☐ OTHER ☐

FORMATION	GAS	PERCENT	CONDENSATE	PERCENT
MESAVERDE		57%		90%
DAKOTA		43%		10%

JUSTIFICATION OF ALLOCATION: 3<sup>RD</sup> Allocation. These percentages are based upon compositional gas analysis tests from the Mesaverde and Dakota formations during completion operations. Subsequent allocations will be submitted every three months after the first delivery date. Allocation splits will keep changing until the gas analysis mole fractions stabilize. Condensate percentages are based upon the formation yields.

APPROVED BY	DATE	TITLE	PHONE
<i>William Tambekou</i>	09/28/2015	<i>Petroleum Engineer</i>	505-564-7746
X <i>Ephraim Schofield</i>	9/11/15	Engineer	505-326-9826
Ephraim Schofield			

NMOCD



# COMPOSITIONAL ALLOCATION FORM

**COMPANY: CONOCOPHILLIPS**

## WELL INFORMATION

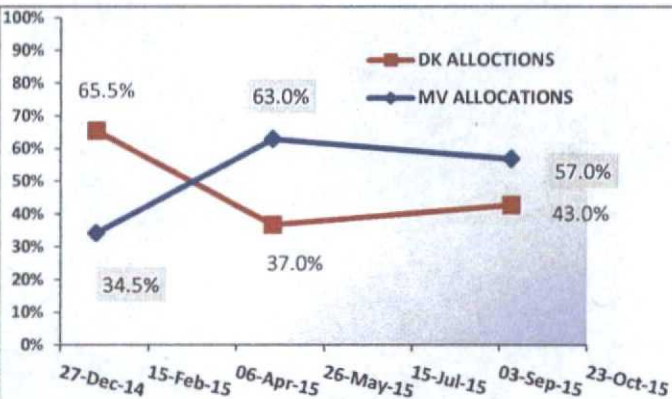
**LOCATION:** NM029N08W005A Downhole  
**WELLNAME:** Sunray 1M  
**API NUMBER:** 3004535544  
**LEASE NUMBER:** SF-078487C  
**COUNTY/ STATE:** San Juan, NM  
**FORMATIONS:** MV/DK (BLANCO MESAVERDE/ BASIN DAKOTA)  
**DHC # APPROVAL:** DHC3894AZ  
**ALLOCATION NUMBER:** 3

## SAMPLE DATA

**ANALYSIS FROM:** Gas Analysis Service (Phone 505-5998998)  
**ANALYSIS REF NUMBER:** CP150504 01/17/15

**SAMPLE DATE:** 9/10/2015

COMPONENT	MOLE %	NORM HC %	BTU
NITROGEN	0.67		
CO2	1.49		
METHANE	84.80	86.7%	856.44
ETHANE	7.19	7.4%	127.28
PROPANE	3.19	3.26%	80.29
I-BUTANE	0.78	0.8%	25.39
N-BUTANE	0.80	0.8%	26.04
I-PENTANE	0.33	0.3%	13.12
N-PENTANE	0.21	0.2%	8.30
HEXANE PLUS	0.55	0.6%	28.99
	100.000		1187.64
HYDROCARBON	97.843		



## END POINTS INFORMATION

FROM STAND ALONE WELLS OR REAL TIME DATA

END POINTS INFORMATION	METHANE		ETHANE		PROPANE		TOTAL BUTANE	
	C1MV	C1DK	C2MV	C2DK	C3MV	C3DK	C4MV	C4DK
CONCENTRATION	81.73%	93.14%	9.68%	4.78%	4.72%	0.94%	2.19%	0.54%
Confidence ratio*	16.3		15.1		19.34		8.4	

\*(Endpoints diff / Observed Variance)

■ If red, Member Conf ratio too low to be used for allocation purposes

	MV	DK	MV	DK	MV	DK	MV	DK
Allocations*	57.0%	43.0%	52%	48%	61%	39%	37%	63%

\*Calculated using formulas below

MV ALLOC= DKendP-Mix / DKendP-MVendP

DK ALLOC= Mix-MVPend / DKendP-MVendP

**CENTRAL MEMBER\***

CONF RATIO	COMP
19.3	C3
<b>CM ALLOC</b>	
MV	DK
61%	39%

\*Central Member (Component with higher Confidence Ratio)

## ALLOCATION CALCULATION

ONLY THOSE COMPONENTS WHOSE ALLOCATIONS ARE 15% POINTS WITHIN THE CENTRAL MEMBER WILL BE USED FOR THE AVERAGE ESTIMATION (Zeros and Neg Discarded)

15% Check	MV ALL
C1	57.000%
C2	52.000%
C3	61.000%
C4	

OFFICIAL GAS ALLOC	
MV	DK
57.0%	43.0%
Oil*	Oil*
90%	10%

\* Oil allocation based on Historical yields

\* If both are zero then Oil alloc= Gas alloc

## SIGNATURES

NAME

TITLE

DATE

SIGNATURE

Ephraim Schofield

Reservoir Engineer 9/11/15

*[Signature]*