

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

811 South First St., Artesia, NM 88210-2835

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department**OIL CONSERVATION DIVISION**2040 S. Pacheco
Santa Fe, New Mexico 87505-6429**APPLICATION FOR DOWNHOLE COMMINGLING**Form C-107-A
New 3-12-96**APPROVAL PROCESS :**☒ Administrative ☐ Hearing**EXISTING WELLBORE**☒ YES ☐ NO**Burlington Resources Oil & Gas Company****PO Box 4289, Farmington, NM 87499**

Operator

Address

ALLISON UNIT**17****K 24-32N-7W****San Juan**

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 6784 API NO. 30-045-11294 Federal ☒ , State , (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Blanco Mesaverde - 72319		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	Will be supplied upon completion	<div style="text-align: center;"> RECEIVED MAY 28 1997 OIL CON. DIV. DIST. 3 </div>	7968' - 8103'
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Current) a. 574 psi (see attachment)	a.	a. 786 psi (see attachment)
	(Original) b. 1212 psi (see attachment)	b.	b. 3282 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 978		BTU 947
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	no		yes
* If Shut-In and oil/gas/water rates of last production	Date: n/a Rates:	Date: Rates:	Date: n/a Rates:

Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data

Well Location and Acreage Dedication Plat

Section A.

Date JUNE 19, 1958

Operator EL PASO NATURAL GAS COMPANY Lease ALLISON UNIT FEE
 Well No. 17 (MD) Unit Letter K Section 24 Township 32-N Range 7-W NMPM
 Located 1650 Feet From SOUTH Line, 1650 Feet From WEST Line
 County SAN JUAN G. L. Elevation 6499 Dedicated Acreage 320 & 320 Acres
 Name of Producing Formation MESA VERDE & DAKOTA Pool BLANCO MV, BASIN DAKOTA

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?

Yes _____ No X2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No _____. If answer is "yes", Type of Consolidation.Unit Agreement

3. If the answer to question two is "no", list all the owners and their respective interests below:

OwnerLand Description

APR 11 1961
 OIL CON. COM.
 DIST. 3

Section B.

This is to certify that the information
 in Section A above is true and complete
 to the best of my knowledge and belief.

El Paso Natural Gas Company

(Operator)

Original Signed By: D.H. Oheim

(Representative)

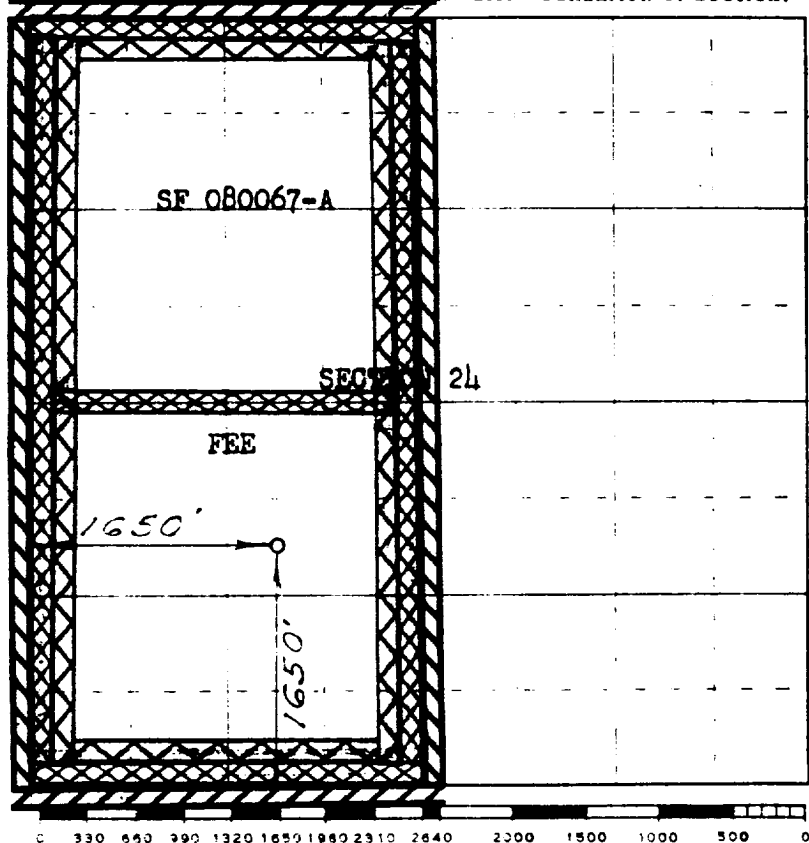
Box 990

(Address)

Farmington, New Mexico

NOTE: THIS PLAT REISSUED TO SHOW
 CORRECTED DAKOTA DEDICATION.
 1-3-61

Note: All distances must be from outer boundaries of section.



Scale 4 inches equal 1 mile

This is to certify that the above plat was prepared from field notes of actual surveys
 made by me or under my supervision and that the same are true and correct to the best
 of my knowledge and belief.

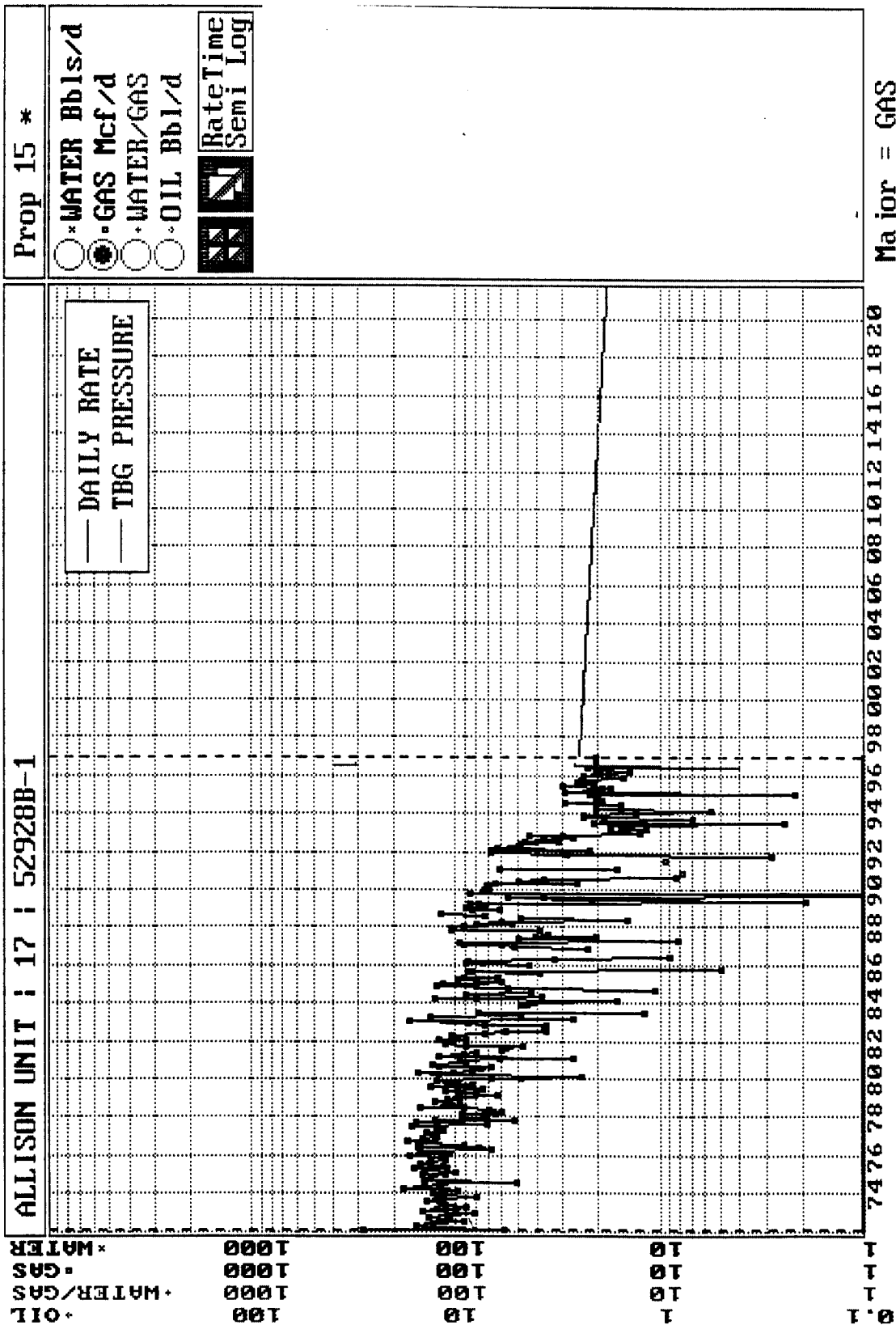
(Seal)

Date Surveyed JUNE 18, 1958

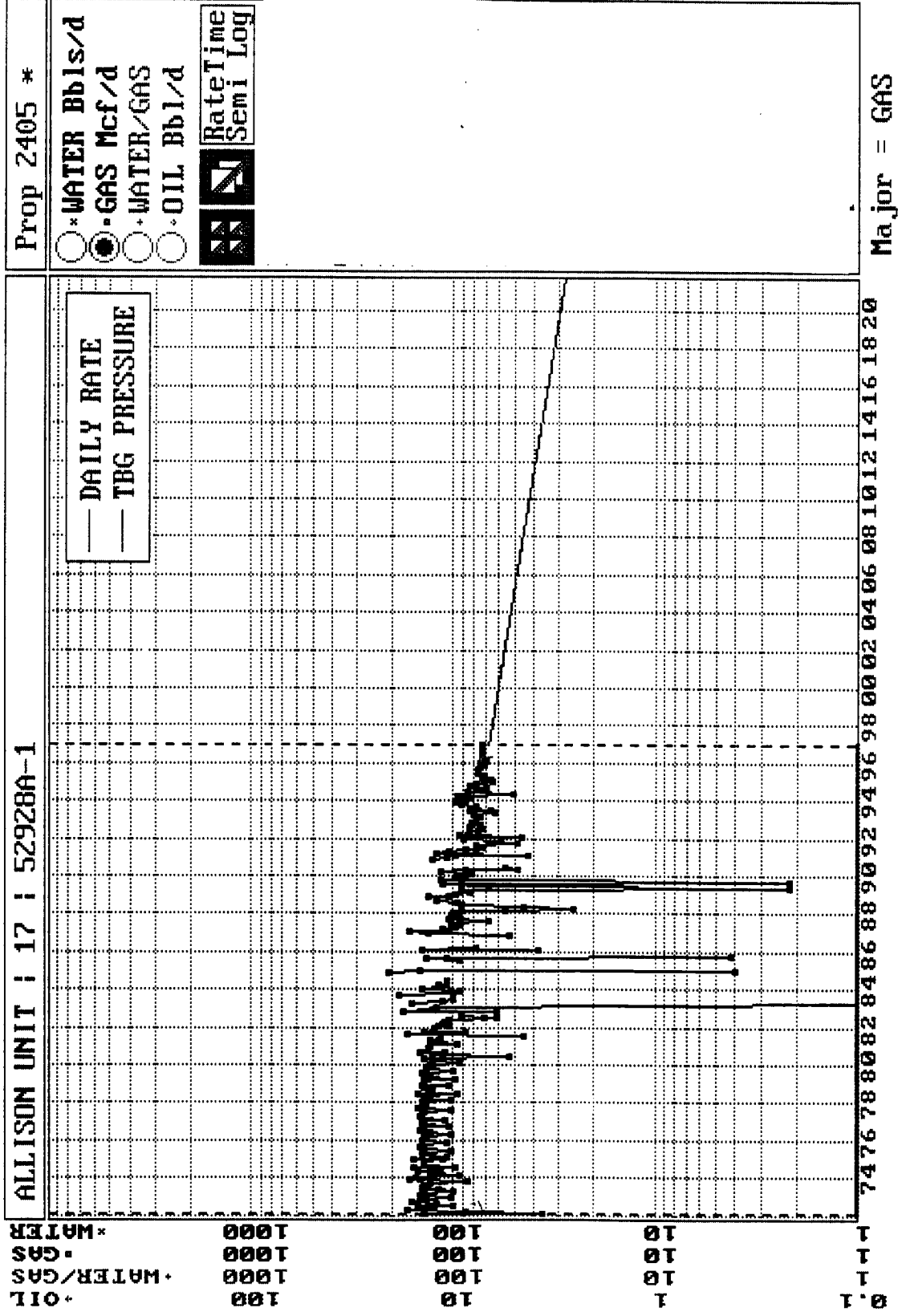
David O. Vilner
 Registered Professional Engineer and/or Land Surveyor

Farmington, New Mexico

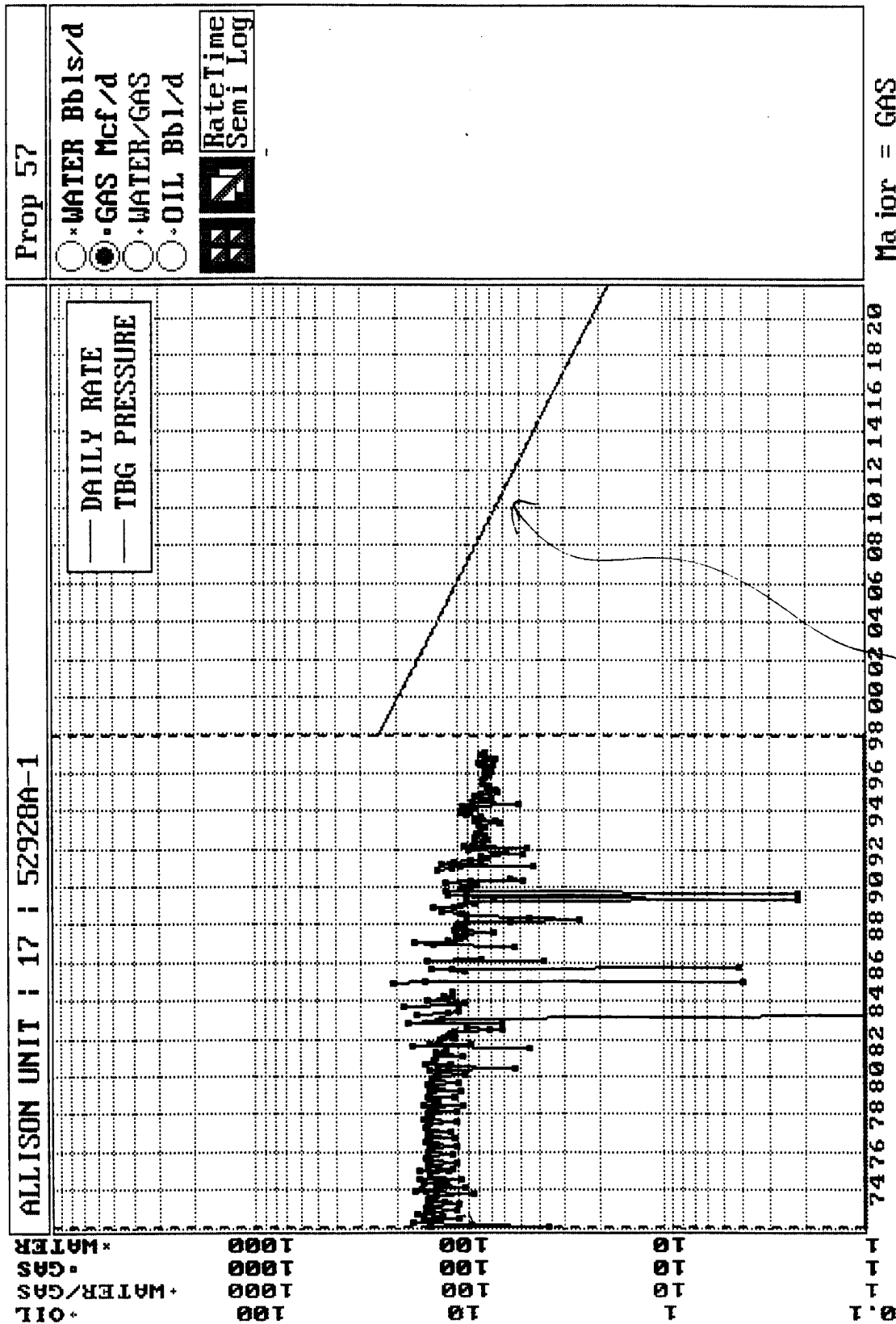
DAKOTA



MESAVEROE



- ESTIMATED - INCREMENTAL PRODUCTION FROM MV Payadd



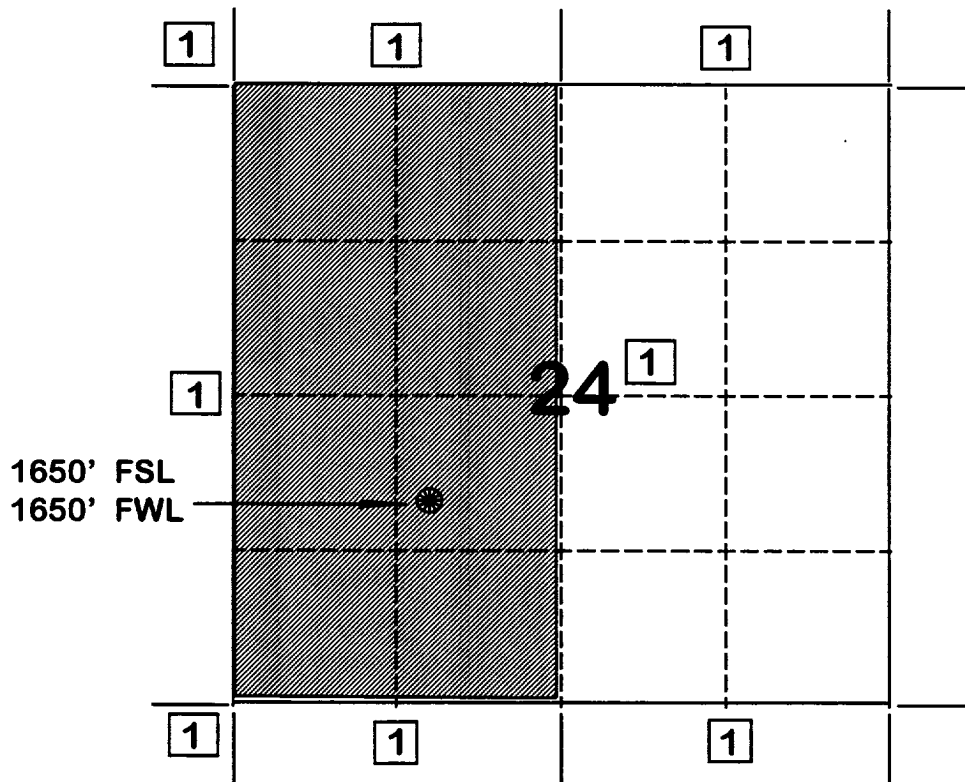
It is not the predicted total MV production profile - 140 m.b.

BURLINGTON RESOURCES OIL AND GAS COMPANY

**Allison Unit #17
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde/Dakota Formations Commingle Well

Township 32 North, Range 7 West



1) Burlington Resources Oil and Gas Company

Page No.: 2
Print Time: Tue May 13 14:43:47 1997
Property ID: 15
Property Name: ALLISON UNIT | 17 | 52928B-1
Table Name: K:\ARIES\RR97PDP\TEST.DBF

DAKOTA

--DATE-- ---CUM GAS-- M SIWHP
Mcf Psi

08/11/58	0	2762.0	← original
07/29/59	90000	2067.0	
07/29/60	277000	1625.0	
07/28/61	396000	1548.0	
11/20/62	475000	1607.0	
05/06/63	516000	1532.0	
09/28/64	637000	1428.0	
10/18/65	762000	1405.0	
02/23/66	797000	1441.0	
03/06/67	910000	1339.0	
03/08/68	1020000	1275.0	
06/02/70	1226555	1207.0	
12/14/71	1337127	699.0	
08/10/72	1370622	1343.0	
06/18/73	1405276	563.0	
04/29/75	1487308	1252.0	
08/08/77	1597457	1152.0	
06/04/79	1660790	1212.0	
05/15/81	1733639	1163.0	
04/25/83	1774762	945.0	
05/02/85	1816382	824.0	
06/08/90	1907212	670.0	
5/14/97		571.0	← current

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.608
COND. OR MISC. (C/M)	C
%N2	0.13
%CO2	5.23
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	7990
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	225
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2762
BOTTOMHOLE PRESSURE (PSIA)	3289.2

ALLISON UNIT #17 - DAKOTA - ORIGINAL

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.608
COND. OR MISC. (C/M)	C
%N2	0.13
%CO2	5.23
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	7990
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	225
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	571
BOTTOMHOLE PRESSURE (PSIA)	670.9

ALLISON UNIT #17 DAKOTA - CURRENT

Page No.: 1
 Print Time: Tue May 13 14:43:46 1997
 Property ID: 2405
 Property Name: ALLISON UNIT | 17 | 52928A-1
 Table Name: K:\ARIES\RR97PDP\TEST.DBF

MESAVERDE

--DATE-- ---CUM GAS-- M SIWHP
 ::::: :::::McF::::: :::::Psi:::::

08/11/58	0	1074.0	← original
09/29/58	0	1061.0	
10/22/59	78000	845.0	
07/29/60	138000	617.0	
07/28/61	209000	605.0	
04/25/62	249000	664.0	
04/29/63	312000	659.0	
04/22/64	346000	670.0	
05/03/65	408000	606.0	
02/23/66	460000	590.0	
03/06/67	511000	609.0	
03/08/68	554000	646.0	
06/22/69	607035	682.0	
06/02/70	649968	699.0	
12/14/71	721580	699.0	
08/10/72	750543	629.0	
04/18/74	831312	612.0	
06/02/76	937274	659.0	
08/03/78	1043994	585.0	
06/05/80	1127883	597.0	
05/18/82	1208249	582.0	
07/02/84	1277592	578.0	
03/18/86	1307046	548.0	
09/31/89	1396520	554.0	
09/31/89	1396520	554.0	
09/31/89	1396520	554.0	
03/18/91	1435633	530.0	
08/13/91	1448448	542.0	
05/31/93	1495971	513.0	
5/14/97		465.0	← current

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.586
COND. OR MISC. (C/M)	C
%N2	0.07
%CO2	2.28
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	5740
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	175
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1074
BOTTOMHOLE PRESSURE (PSIA)	1215.2

ALLISON UNIT #17 - MESAVERDE - ORIGINAL

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.586
COND. OR MISC. (C/M)	C
%N2	0.07
%CO2	2.28
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	5740
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	175
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	465
BOTTOMHOLE PRESSURE (PSIA)	522.0

ALLISON UNIT #17 MESAVERDE - CURRENT

FARMINGTON 1997 MONTHLY PRODUCTION FOR 52928A
ALLISON UNIT 17
BLANCO MESAVERDE (PRORATED GAS FIELD

PHS030M

MESAVERDE ZONE

MO	T	S	DAYS	ON	PC	OIL	PROD	GRV	PC	PROD	ON	BTU	PRESS	GAS	WATER	PROD
1	2	F							01	2250	31	987	15.025			
2	2	F							01	2018	28	987	15.025			
3	2	F							01	2249	31	987	15.025			
4																
5																
6																
7																
8																
9																
10																
11																
12																

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE
PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTIC
00/00/00 00:00:00:0 PRS 05/03/97

B MY JOB NUM LU #2

FARMINGTON 1997 MONTHLY PRODUCTION FOR 52928B
ALLISON UNIT 17
BASIN DAKOTA (PRORATED GAS) FIELD

PHS030M

DAKOTA ZONE

MO	T	S	DAYS	ON	PC	OIL	PROD	GRV	PC	PROD	ON	BTU	PRESS	GAS	WATER	PROD
1	2	F							01	604	31	960	15.025			
2	2	F							01	696	28	959	15.025			
3	2	F							01	692	31	959	15.025			
4																
5																
6																
7																
8																
9																
10																
11																
12																

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE
PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTIC
00/00/00 00:00:00:0 PRS 05/03/97

B MY JOB NUM LU #2

Section 24, T32N, R7W
Blanco Mesaverde / Basin Dakota



**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 10743
Order No. R-9918**

**APPLICATION OF MERIDIAN OIL INC.
FOR DOWNHOLE COMMINGLING AND FOR
AN ADMINISTRATIVE DOWNHOLE COMMINGLING
PROCEDURE WITHIN THE ALLISON UNIT
AREA, SAN JUAN COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 17, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 6th day of July, 1993, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Meridian Oil Inc., seeks approval to commingle gas production from the Blanco-Mesaverde and Basin-Dakota Pools within the Allison Unit Well No. 9R located 1720 feet from the North line and 1655 feet from the East line (Unit G) of Section 13, Township 32 North, Range 7 West, NMPM, San Juan County, New Mexico.

(3) The applicant further seeks the adoption of an administrative procedure for authorizing the downhole commingling of Blanco-Mesaverde and Basin-Dakota Pool production within certain existing and subsequently drilled wells in its Allison Unit Area, San Juan County, New Mexico, without additional notice to each affected interest owner within the Unit Area.

(4) The Allison Unit Well No. 9R is to be drilled as a replacement well for the Allison Unit Well No. 9 which is located 1765 feet from the North line and 1500 feet from the East line (Unit G) of Section 13 and which is currently completed in and producing from the Basin-Dakota Pool.

(5) The Allison Unit Well No. 9 was drilled in 1955 and has cumulatively recovered some 4.4 BCF of gas from the Basin-Dakota Pool.

(6) Due to the age and mechanical condition of the Allison Unit Well No. 9, the applicant has estimated that it will not recover some 1.7 BCF of gas in the Basin-Dakota Pool underlying the E/2 of Section 13.

(7) Applicant's testimony indicates that due to economics, the Allison Unit Well No. 9R cannot be drilled solely to recover gas reserves in the Basin-Dakota Pool.

(8) The applicant expects to encounter marginal production only from the Blanco-Mesaverde Pool.

(9) The proposed downhole commingling is necessary in order for the applicant to economically recover Basin-Dakota and Blanco-Mesaverde Pool reserves underlying the E/2 of Section 13.

(10) The Allison Unit is a Federal exploratory unit initially comprising some 11,705 acres in New Mexico and some 2,069 acres in Colorado. Within New Mexico, the unit comprises portions of Township 32 North, Ranges 6 and 7 West, NMPM, San Juan County. The unit was formed in 1950 and is currently operated by Meridian Oil Inc.

(11) The evidence and testimony presented indicates that the Basin-Dakota and Blanco-Mesaverde Pools have both been substantially developed within the Allison Unit.

(12) The applicant has identified numerous Mesaverde and Dakota well locations within the Allison Unit which by virtue of marginal gas reserves and resulting poor economics cannot be economically drilled and produced as stand alone units.

(13) The current well economics and projected Dakota and Mesaverde gas reserves underlying these respective tracts virtually assure that these wells must be downhole commingled in order to meet the economic criteria for drilling.

(14) The applicant expects initial producing rates from both the Mesaverde and Dakota formations to be fairly marginal in nature.

(15) The applicant further demonstrated through its evidence and testimony that within the wells it proposes or will propose to commingle within the Unit Area:

- a) there will be no crossflow between the two commingled pools;
- b) neither commingled zone exposes the other to damage by produced liquids;
- c) the fluids from each zone are compatible with the other;
- d) the bottomhole pressure of the lower pressure zone should not be less than 50 percent of the bottomhole pressure of the higher pressure zone adjusted to a common datum; and,
- e) the value of the commingled production is not less than the sum of the values of the individual production.

(16) The Dakota and Mesaverde Participating Areas within the Allison Unit are not common.

(17) By virtue of different Participating Areas, the interest ownership between the Dakota and Mesaverde formations within any given wellbore is not common.

(18) Applicant's Exhibit No. 2 in this case is a list of three hundred and fifty four (354) interest owners in the Dakota and Mesaverde Participating Areas within the Allison Unit. All such interest owners were notified of the application in this case.

(19) Rule No. 303(C) of the Division Rules and Regulations provides that administrative approval for downhole commingling may be granted provided that the interest ownership, including working, royalty and overriding royalty interest, is common among the commingled zones.

(20) Applicant's proposed administrative procedure would provide for Division approval to downhole commingle wells in the Allison Unit Area without hearing, and without the requirement that each interest owner in the Dakota and Mesaverde Participating Areas be notified of such commingling.

(21) The downhole commingling of wells within the Allison Unit Area will benefit working, royalty and overriding royalty interest owners. In addition, the downhole commingling of wells within the Allison Unit Area should not violate the correlative rights of any interest owner.

(22) Evidence in this case indicates that . . . to each interest owner within the Dakota and Mesaverde Participating Areas of subsequent downhole comminglings within the Allison Unit is unnecessary and is an excessive burden on the applicant.

(23) No interest owner and/or offset operator appeared at the hearing in opposition to the application.

(24) An administrative procedure should be established within the Allison Unit for obtaining approval for subsequently downhole commingled wells without notice to Unit interest owners and hearing, provided however that, all provisions contained within Rule No. 303(C) of the Division Rules and Regulations, with the exception of Part 1 (b)(v), are fully complied with.

(25) The proposed administrative procedure for obtaining approval for downhole commingling will allow the applicant the opportunity to recover additional gas reserves from the Allison Unit Area which may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(26) In the interest of prevention of waste and protection of correlative rights, the proposed downhole commingling within the Allison Unit Well No. 9R should be approved.

(27) The applicant should consult with the supervisor of the Aztec District Office of the Division subsequent to the completion of the subject well in order to determine a proper allocation of production.

(28) The operator should immediately notify the supervisor of the Aztec district office of the Division any time the subject well has been shut-in for seven consecutive days and shall concurrently present, to the Division, a plan for remedial action.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Meridian Oil Inc., is hereby authorized to commingle gas production from the Blanco-Mesaverde and Basin-Dakota Pools within the Allison Unit Well No. 9R located 1720 feet from the North line and 1655 feet from the East line (Unit G) of Section 13, Township 32 North, Range 7 West, NMPM, San Juan County, New Mexico.

(2) The applicant shall consult with the supervisor of the Aztec district office of the Division subsequent to the completion of the subject well in order to determine a proper allocation of production.

(3) The operator shall immediately notify the supervisor of the Aztec district office of the Division any time the subject well has been shut-in for seven consecutive days and shall concurrently present, to the Division, a plan for remedial action.

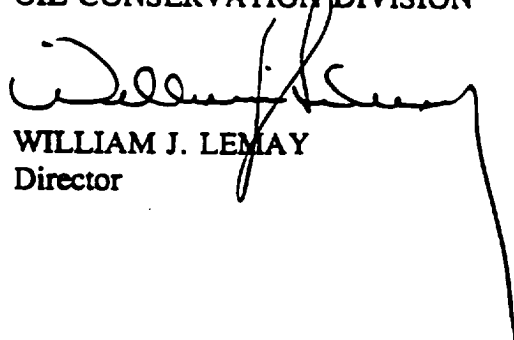
(4) An administrative procedure for obtaining approval to downhole commingle wells within the Allison Unit, located in portions of Township 32 North, Ranges 6 and 7 West, NMPM, San Juan County, New Mexico, is hereby established.

(5) In order to obtain Division authorization to downhole commingle wells within the Allison Unit, the applicant shall file an application with the Santa Fe and Aztec Offices of the Division. Such application shall contain all of the information required under Rule No. 303(C) of the Division Rules and Regulations, provided however that the applicant shall not be required to provide notice to all interest owners within the Dakota and Mesaverde Participating Areas in the Allison Unit of such proposed commingling. In addition, the application shall contain evidence that all offset operators and the United States Bureau of Land Management (BLM) have been notified of the proposed commingling.

(6) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

S E A L