

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First St., Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410
DISTRICT IV
2040 S. Pacheco, Santa Fe, NM 87505

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
Revised March 17, 1999

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

BURLINGTON RESOURCES OIL & GAS COMPANY
Operator

PO Box 4289, Farmington, NM 87499
Address

Jicarilla 153
Lease

22
Well No.

M. Sec 25, T26N, R5W
Unit Ltr. - Sec - Twp - Rge

Rio Arriba
County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 16579 API NO. 30-039-2298600 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 Mesa Verde - 72319		W.Lindrith Gallup Dakota - 39189
2. Top and Bottom of Pay Section (Perforations)	5040' - 5410'		7276' - 7530'
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: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	(Current) a. 250 psia @ 5225' (Original) b. 1582 psia @ 5225'	RECEIVED JUL 14 1999 OIL CON. DIV. DIST. 3 a. b.	a. 561 psia @ 7403' b. 1775 psia @ 7403'
6. Oil Gravity (EAPI) or Gas BTU Content	1236 BTU		1262 BTU
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		Yes
* If Shut-In, give date and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: Rates:	Date: Rates:	Date: Rates:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 05/31/99 Rates: 101 MCFD 0.3 BOD, 0 BWD	Date: Rates:	Date: 05/31/99 Rates: 133 MCFD, 0.4 BOD, 0 BWD
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: Gas: Will supply for commingling	Oil: % Gas: %	Oil: Gas: Will supply for commingling

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☐ Yes ☐ No
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No

11. Will cross-flow occur? ☒ Yes ☐ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☒ Yes ☐ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No

13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S) _____

16. ATTACHMENTS:

- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation method or formula.
- * Notification list of all offset operators.
- * Notification list of working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

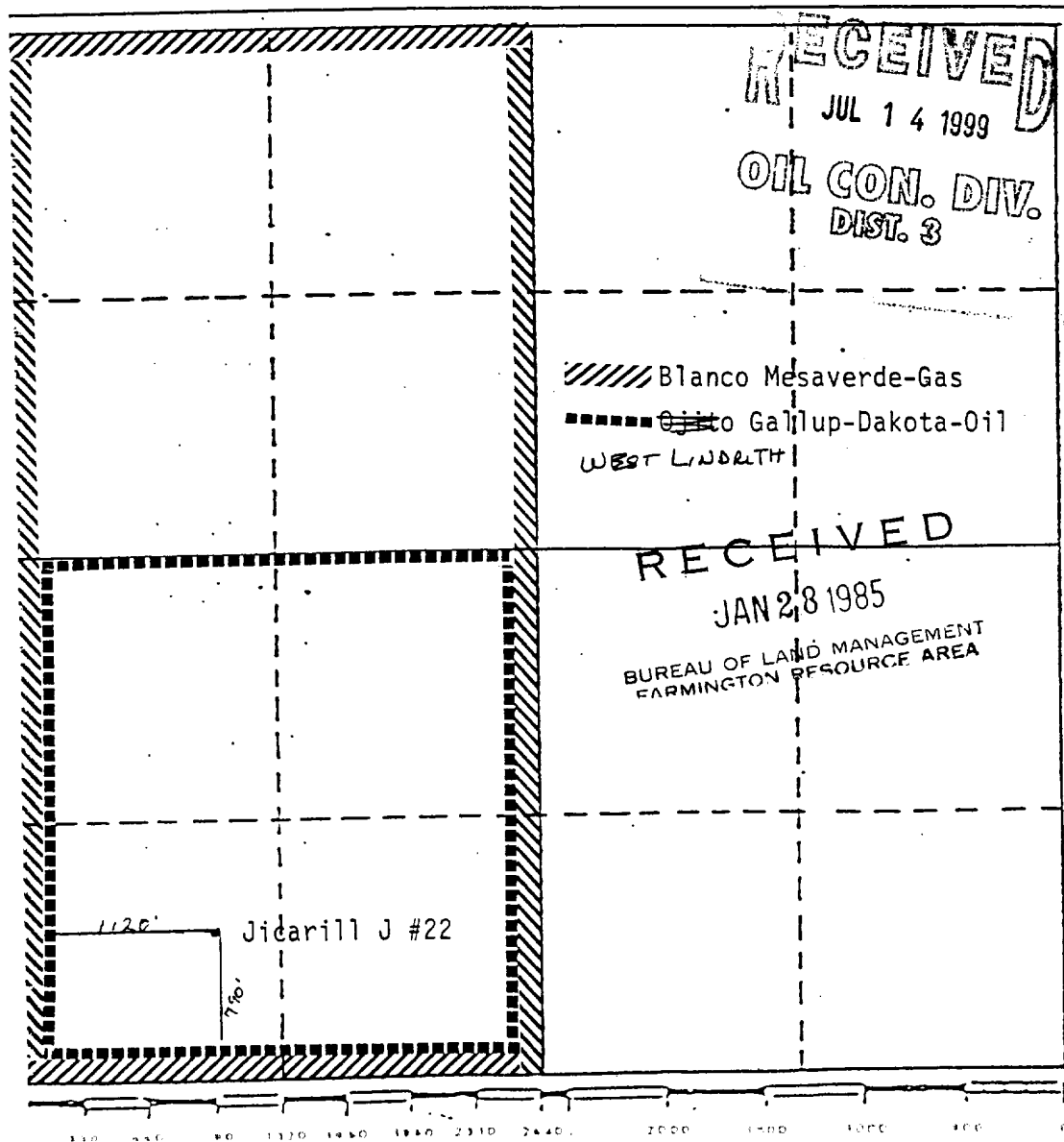
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Timothy J. Friesenhahn TITLE Operations Engineer DATE 07-12-99

TYPE OR PRINT NAME Timothy J. Friesenhahn TELEPHONE NO. (505) 326-9700

Operator Union Texas Petroleum Corporation		Lease Jicarilla J #22		Well No. 22	
Well Letter 1	Section 25	Township 26N	Range 5W	County Rio Arriba	
Civil Footage Location of Well:					
790 feet from the South line and		1120 feet from the West line			
Ground Level Elev. 5664	Producing Formation Mesaverde	Pool Blanco	Dedicated Acreage: W/2 320.00		
Gallup-Dakota		WEST LINORITH		SW/4 160.00	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to work interest and royalty).
 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?
- ☐ Yes ☒ No If answer is "yes," type of consolidation _____
- If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) Union Texas Exploration
- No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION	
I hereby certify that the information contained herein is true and complete to best of my knowledge and belief.	
<i>Rudy D. Motto</i>	
Name	Rudy D. Motto
Position	Area Operations Manager
Company	Union Texas Petroleum
Date	January 25, 1985
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
<i>[Signature]</i>	
Date Surveyed	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	

JICARILLA 153 : 22 : 36014-1 Gallup - Dakota

Legend:

- WATER Bbls/d
- GAS Mcf/d
- OIL/GAS Bbl/M
- OIL Bbl/d

RateTime Semi Log

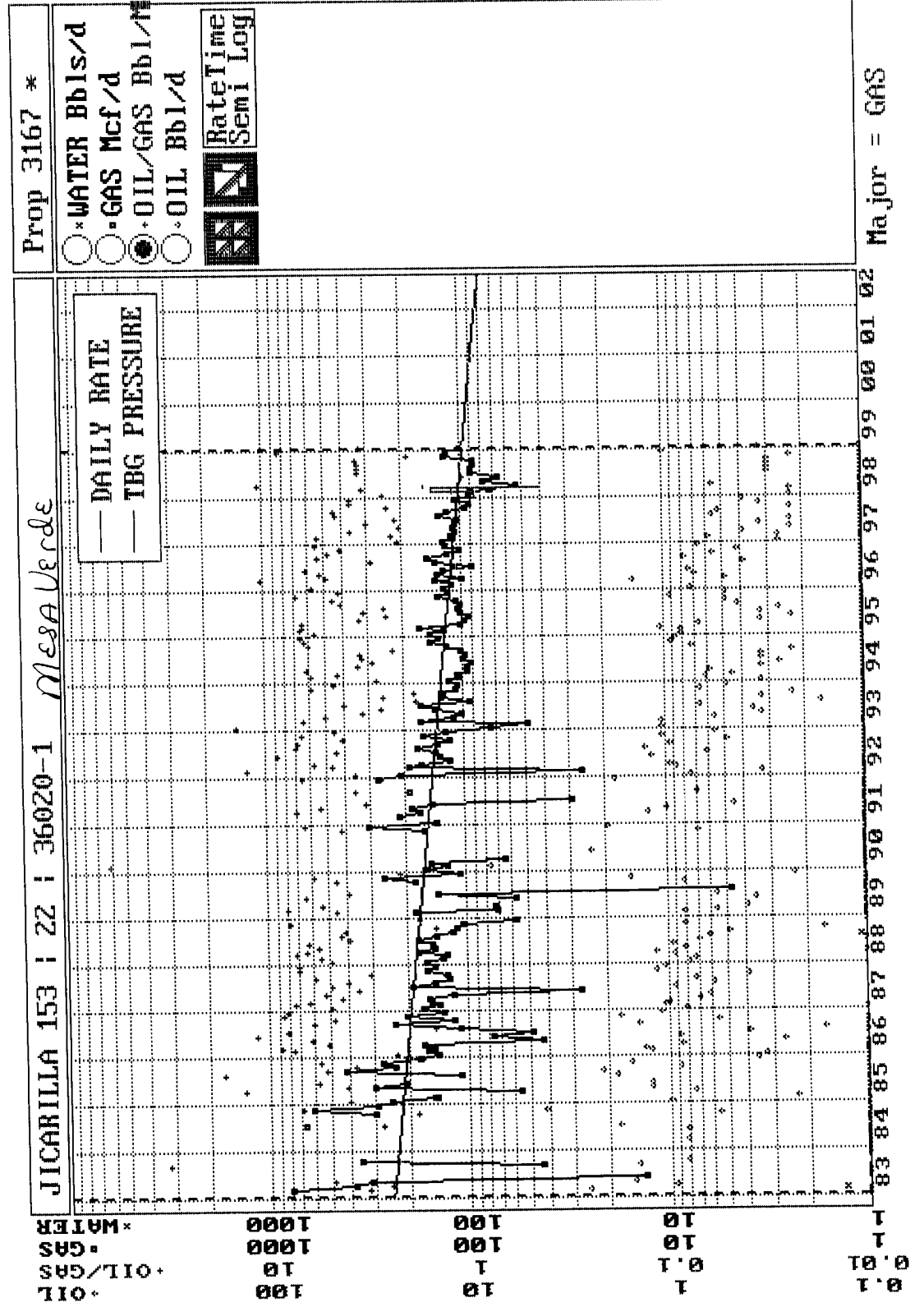
Y-axis Labels:

- 1000 OIL
- 1000 OIL/GAS
- 1000 GAS
- 1000 WATER

X-axis Labels:

83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02

Major = GAS



Page No.: 1

Print Time: Mon May 10 09:46:42 1999

Property ID: 176

Property Name: JICARILLA 153 | 22 | 36020-1 *Mesa Verde*

Table Name: S:\JSMITH\ARIES\99WORK\TEST.DBF

<u>--DATE--</u>	<u>---CUM_GAS--</u>	<u>M SIWHP</u>
	<u>Mcf</u>	<u>Psi</u>

10/26/82	0	1337.0	<i>ORIGINAL</i>
04/24/83	35674	862.0	
07/24/84	78264	889.0	
05/28/85	137813	749.0	
04/01/86	200480	794.0	
11/29/89	360122	758.0	
05/15/91	414667	609.0	
05/29/91	414667	621.0	
08/31/93	513862	560.0	

3/31/99	741973	219	<i>CURRENT</i>
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BASED ON PRESSURE vs GAS Cum CURVE

Page No.: 2

Print Time: Mon May 10 09:09:48 1999

Offset Well for JICARILLA 153#22

Property ID: 174

Property Name: JICARILLA 153 | 12 | 35954-1 DK

Table Name: S:\JSMITH\ARIES\99WORK\TEST.DBF

---DATE--	---CUM_GAS--	M SIWHP
	Mcf	Psi

08/08/68	0	1427.0
06/24/70	232872	1003.0
04/17/71	339036	1021.0
04/17/72	451369	853.0
06/02/73	547004	986.0
05/02/75	714030	851.0
05/02/77	862687	616.0
07/01/79	992237	644.0
05/31/81	1090557	516.0
06/08/83	1154841	494.0
11/05/85	1226500	629.0
05/18/88	1296271	569.0
10/11/90	1325257	703.0
03/29/92	1345851	576.0
3/31/99	1524223	466

Original

Current

Based on Cum Gas vs Pressure Curve

Jicarilla 153 #22
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Mesaverde		Dakota	
<u>MV-Current</u>		<u>DK-Current</u>	
GAS GRAVITY	0.725	GAS GRAVITY	0.707
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.34	%N2	0.50
%CO2	0.46	%CO2	0.85
%H2S	0	%H2S	0
DIAMETER (IN)	6.969	DIAMETER (IN)	4.95
DEPTH (FT)	5225	DEPTH (FT)	7403
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	138	BOTTOMHOLE TEMPERATURE (DEG F)	170
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	219	SURFACE PRESSURE (PSIA)	466
BOTTOMHOLE PRESSURE (PSIA)	250.1	BOTTOMHOLE PRESSURE (PSIA)	561.3
<u>MV-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.725	GAS GRAVITY	0.707
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.34	%N2	0.50
%CO2	0.46	%CO2	0.85
%H2S	0	%H2S	0
DIAMETER (IN)	6.969	DIAMETER (IN)	4.95
DEPTH (FT)	5225	DEPTH (FT)	7403
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	138	BOTTOMHOLE TEMPERATURE (DEG F)	170
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1337	SURFACE PRESSURE (PSIA)	1427
BOTTOMHOLE PRESSURE (PSIA)	1581.5	BOTTOMHOLE PRESSURE (PSIA)	1775.2

Cumulative Monthly Well Report

December 1998 -- June 1999

Select By : Completions
Sort By :

Page No : 1
Report Number : R_290
Last Update :
Print Date : 06/23/1999, 9:44:15

Completion	Date	Cur Oil	Cum Oil	Cur Gas	Cum Gas	Cur Wat	Cum Wat
JICARILLA 153	12/31/1998	30.06	43.54	3,630.30	5,857.74	0.00	0.00
22	01/31/1999	10.03	53.57	3,092.07	8,949.81	0.00	0.00
Mesa Verde	02/28/1999	13.37	66.94	3,052.86	12,002.67	0.00	0.00
	03/31/1999	0.00	66.94	3,139.13	15,141.80	23.46	23.46
	04/30/1999	10.05	76.99	3,150.90	18,292.70	0.00	23.46
	05/31/1999	10.06	87.04	3,129.33	21,422.03	0.00	23.46
	06/30/1999	0.00	87.04	0.00	21,422.03	0.00	23.46
	12/31/1998	25.02	31.69	3,085.22	6,791.98	0.00	0.00
	01/31/1999	1.57	33.27	3,401.56	10,193.54	31.79	31.79
	02/28/1999	13.35	46.61	4,237.50	14,431.04	0.00	31.79
Dakota	03/31/1999	15.03	61.64	4,339.81	18,770.85	0.00	31.79
	04/30/1999	0.78	62.41	3,355.80	22,126.65	20.08	51.87
	05/31/1999	12.65	75.06	4,121.19	26,247.84	0.00	51.87
	06/30/1999	0.00	75.06	0.00	26,247.84	0.00	51.87

FARMINGTON

ANNUAL PRODUCTION FOR 36020

PHS020M1

JICARILLA 153 22

BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE

===== OIL CUM =====

===== GAS CUM =====

===== WATER CUM =====

PC DATE

BBLs

PC DATE

MCF

DATE

BBLs

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=====
YEAR      OIL      OIL CUM      GAS      GAS CUM      WATER      WATER CUM
1993      179      2810      42159     528477              261
1994      182      2992      40364     568841              261
1995      208      3200      42954     611795              261
1996      213      3413      44362     656157              261
1997      132      3545      40572     696729              261
1998       98      3643      32330     729059 - 3707 (Sep 11/30) 261
          60
          3703      Cum 3/31      16621
                      741,973

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POSITION CURSOR BY YEAR AND PRESS ENTER TO DISPLAY MONTHLY PRODUCTION

ENTER - CONTINUES ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF6 - RETURN TO WELL-INFO DISPLAY

PF9 - ANNUAL INJECTION DISPLAY

PF10 - HELP INFORMATION

FARMINGTON

1998 MONTHLY PRODUCTION FOR 36020

PHS030M1

JICARILLA 153 22

BLANCO MESAVERDE (PRORATED GAS FIELD

MESAVERDE ZONE

DAYS =====					OIL =====		=====		GAS =====					
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	31	02	7		01	2792	31	1219	15.025			
2	2	F	28	02	3		01	2725	28	1241	15.025			
3	2	F	31	02	7		01	2234	31	1241	15.025			
4	2	F	24	02	17		01	1619	24	1241	15.025			
5	2	F	31	02			01	2395	31	1241	15.025			
6	2	F	30	02	2		01	2015	30	1241	15.025			
7	2	F	31	02	17		01	3415	31	1241	15.025			
8	2	F	31	02	19		01	3925	31	1241	15.025			
9	2	F	30	02	17		01	3960	30	1241	15.025			
10	2	F	31	02	9		01	3543	31	1241	15.025			
11	2	F					01	3707		1241	15.025			
12														

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

00/00/00 00:00:00:0

PRS 02/03/99

FARMINGTON

ANNUAL PRODUCTION FOR 36014

PHS020M1

JICARILLA 153 22

LINDRITH GALLUP DAKOTA, WEST FIELD

GALLUP DAKOTA ZONE

===== OIL CUM =====

===== GAS CUM =====

===== WATER CUM =====

PC DATE

BBLs

PC DATE

MCF

DATE

BBLs

YEAR	OIL	OIL CUM	GAS	GAS CUM	WATER	WATER CUM
1993	445	4790	67202	625728		1468
1994	381	5171	64021	689749		1468
1995	344	5515	57056	746805		1468
1996	288	5803	52500	799305		1468
1997	298	6101	52437	851742	(11/98)(Used well Rpt #)	1468
1998	221	6322	45460	897202 - 2103		1468
		<u>68</u>		<u>+ 17292</u>		
		6390	Cum 3/31	912,311		

POSITION CURSOR BY YEAR AND PRESS ENTER TO DISPLAY MONTHLY PRODUCTION

ENTER - CONTINUES ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF6 - RETURN TO WELL-INFO DISPLAY

PF9 - ANNUAL INJECTION DISPLAY

PF10 - HELP INFORMATION

FARMINGTON

1998 MONTHLY PRODUCTION FOR 36014

PHS030M1

JICARILLA 153 22

LINDRITH GALLUP DAKOTA, WEST FIELD

GALLUP DAKOTA ZONE

DAYS =====				OIL =====			===== GAS =====							
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	31	02	17		01	6128	31	1194	15.025			
2	2	F	19	02	47		01	1574	19	1194	15.025			
3	2	F	31	02	17		01	5142	31	1194	15.025			
4	2	F	26	02	20		01	4095	26	1200	15.025			
5	2	F	31	02	28		01	4763	31	1200	15.025			
6	2	F	30	02	24		01	4664	30	1200	15.025			
7	2	F	31	02	12		01	4569	31	1200	15.025			
8	2	F	31	02	18		01	4188	31	1200	15.025			
9	2	F	30	02	13		01	4005	30	1200	15.025			
10	2	F	31	02	25		01	4149	31	1200	15.025			
11	2	S					01	2183		1200	15.025			
12														

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

00/00/00 00:00:00:0

PRS 02/03/99

BURLINGTON RESOURCES OIL AND GAS COMPANY

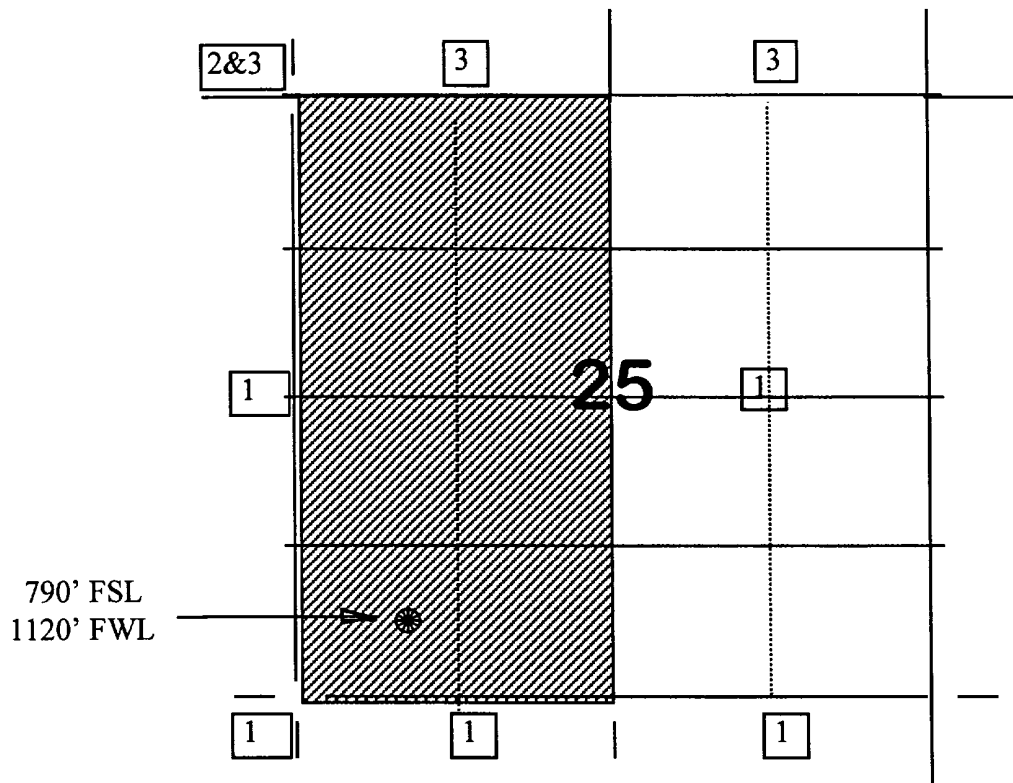
Jicarilla 153 #22

OFFSET OPERATOR/OWNER PLAT

Mesaverde (W/2) & Gallup-Dakota (SW/4) Formations

Commingle well

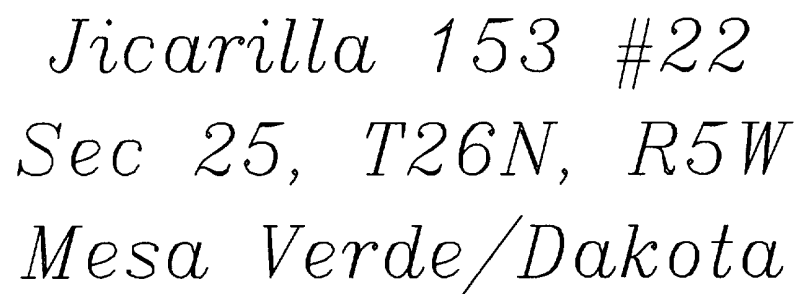
Township 26 North, Range 5 West



1) Burlington Resources

**2) Amoco Production Company
C/O Don Duhrkopf
501 West Lake Park Blvd.
Houston, TX 77079-2696**

**3) Energen Resources MAQ, Inc.
Attn: Rich Corcoran
2198 Bloomfield Highway
Farmington, NM 87401**



Mesa Verde/Dakota