

DATE IN 7/14/99	SUSPENSE 8/3/99	ENGINEER DC	LOGGED BY KV	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Engineering Bureau -
 2040 South Pacheco, Santa Fe, NM 87505



2416

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Directional Drilling**
☐ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement**
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery**
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners**
- [B] ☒ Offset Operators, Leaseholders or Surface Owner**
- [C] ☐ Application is One Which Requires Published Legal Notice**
- [D] ☒ Notification and/or Concurrent Approval by BLM or SLO**
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,**
- [F] ☐ Waivers are Attached**

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Certification

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. **I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.**

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name

Signature

Title

Date

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 ☐ NOBURLINGTON RESOURCES OIL & GAS COMPANY
OperatorPO Box 4289, Farmington, NM 87499
Address

Jicarilla 153

Lease

12

Well No.

D, Sec 35, 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. 30-039-2011300 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 Pictured Cliff South - 72439		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	3052' - 3118'		7244' - 7470'
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. 172 psia @ 3085' (Original) b. 1140 psia @ 3085'	a. b.	a. 557 psia @ 7357' b. 1784 psia @ 7357'
6. Oil Gravity (EAPI) or Gas BTU Content	1231 BTU		1182 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: 03/31/99 Rates: 34 MCFD 0 BOD, 0 BWD	Date: Rates:	Date: 03/31/99 Rates: 86 MCFD, 0 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 ☐ No11. 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 ☐ No13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)14. If this well is on, or communized 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 07-02-99TYPE OR PRINT NAME Timothy J. Friesenhahn TELEPHONE NO. (505) 326-9700

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

Operator **SOUTHERN UNION PRODUCTION COMPANY** Lease **JICARILLA** Well No **153**
 Unit Letter **D** Section **35** Township **26 NORTH** Range **5 WEST** County **RIO ARriba**
 Actual Footage Location of Well: **875** feet from the **NORTH** line **1090** feet from the **WEST** line
 Ground Level Elev. **6628.0** Picturing Formation **SOUTH BLANCO PICTURED CLIFFS** Elevation Average **160**
DAKOTA **BASIN DAKOTA** **320** Acres

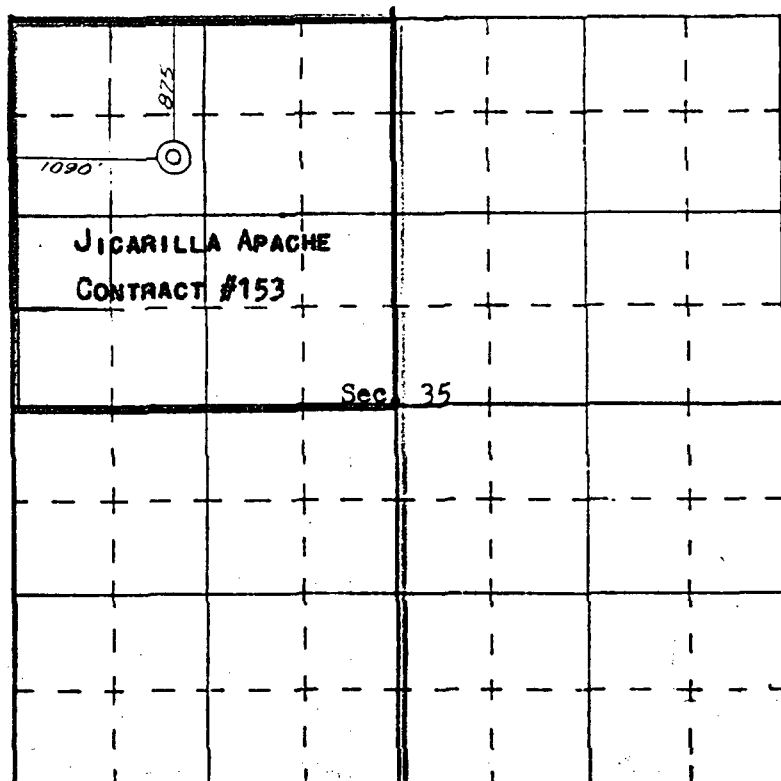
- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation **OPERATING AGREEMENT**

If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non standard unit, eliminating such interests, has been approved by the Commission.

DEDICATED DAKOTA ACREAGE
DEDICATED PICTURED CLIFFS ACREAGE



SCALE—4 INCHES EQUALS 1 MILE

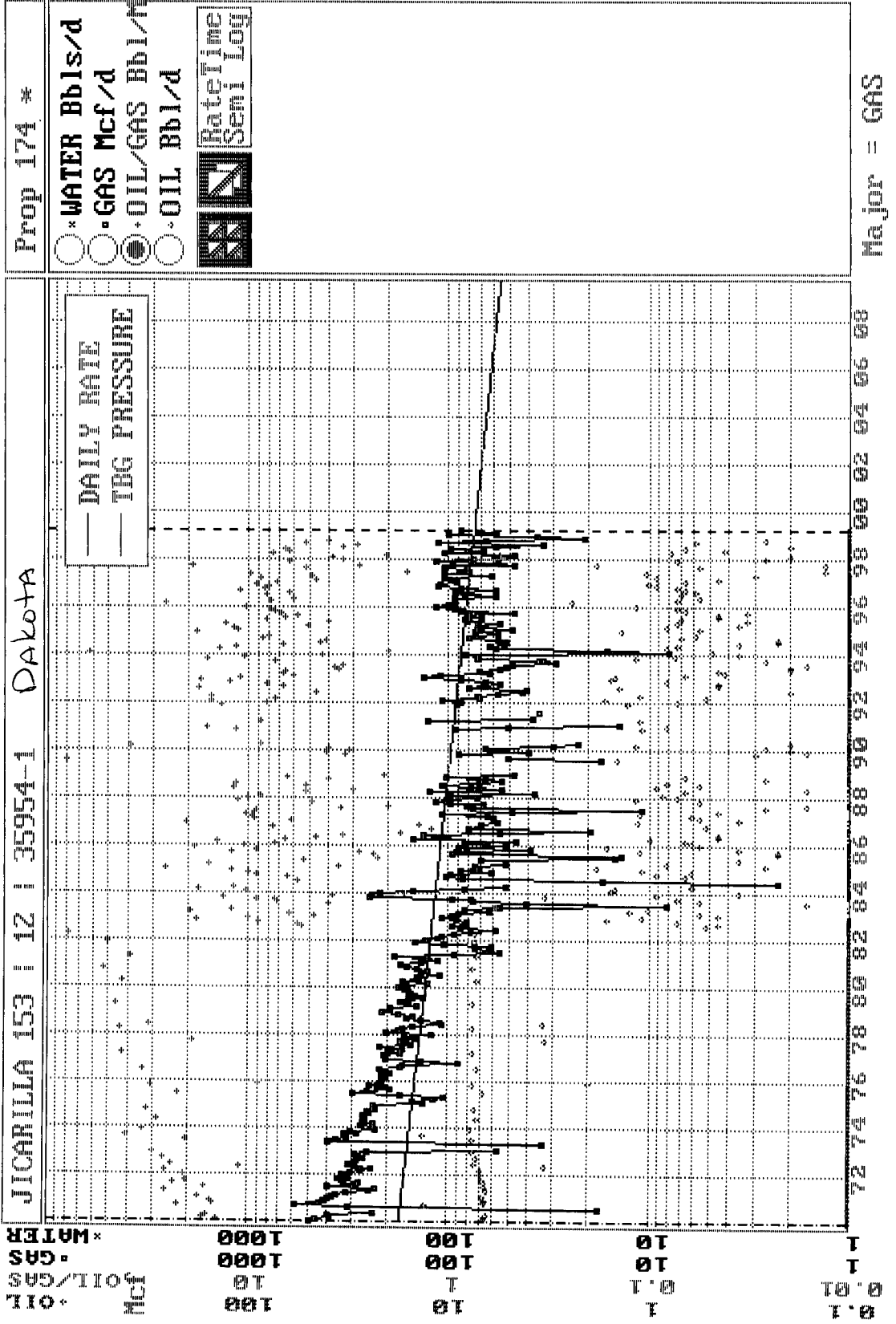
CERTIFICATION

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

Original signed by
 Name **GILBERT D. NOLAND, JR.**
GILBERT D. NOLAND, JR.
 Position **DRILLING SUPERINTENDENT**
 Company **SOUTHERN UNION PRODUCTION COMPANY**
 Date **JUNE 19, 1968**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed **13 June, 1968**
 Registered Professional Engineer
 and/or Land Surveyor
JAMES P. LANE
1463
 Certificate No. **1463**



Page No.: 1

Print Time: Mon May 10 09:09:47 1999

Property ID: 173

Property Name: JICARILLA 153 | 12 | 35953-1 *PC*

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>

08/08/68	0	1035.0
07/23/70	92471	599.0
09/26/71	131944	505.0
07/18/72	157559	463.0
06/02/73	183693	402.0
05/17/74	206267	344.0
05/16/76	249501	329.0
07/17/78	288152	370.0
08/16/80	322610	359.0
07/24/82	371699	416.0
07/24/84	414500	467.0
11/05/85	441237	473.0
05/18/88	475142	423.0
10/11/90	510397	643.0
03/29/92	544269	426.0
05/31/94	596724	250.0

3/31/99	663174	159.0
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Original

CURRENT

BASED ON Cum GAS vs Pressure CURVE

Page No.: 2

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

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	ORIGINAL
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	CURRENT

BASED ON Cum GAS vs PRESSURE CURVE

Jicarilla 153 #12
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Pictured Cliffs		Dakota	
<u>PC-Current</u>		<u>DK-Current</u>	
GAS GRAVITY	0.721	GAS GRAVITY	0.692
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.89	%N2	0.38
%CO2	0.19	%CO2	0.76
%H2S	0	%H2S	0
DIAMETER (IN)	6.969	DIAMETER (IN)	4.052
DEPTH (FT)	3085	DEPTH (FT)	7357
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	111	BOTTOMHOLE TEMPERATURE (DEG F)	181
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	159	SURFACE PRESSURE (PSIA)	466
BOTTOMHOLE PRESSURE (PSIA)	172.1	BOTTOMHOLE PRESSURE (PSIA)	557.0
<u>PC-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.721	GAS GRAVITY	0.692
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.89	%N2	0.38
%CO2	0.19	%CO2	0.76
%H2S	0	%H2S	0
DIAMETER (IN)	6.969	DIAMETER (IN)	4.052
DEPTH (FT)	3085	DEPTH (FT)	7357
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	111	BOTTOMHOLE TEMPERATURE (DEG F)	181
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1035	SURFACE PRESSURE (PSIA)	1427
BOTTOMHOLE PRESSURE (PSIA)	1139.7	BOTTOMHOLE PRESSURE (PSIA)	1753.8

Cumulative Monthly Well Report

May 1998 -- May 1999

Select By : Completions
Sort By :

Page No : 1
Report Number : R_290
Last Update :
Print Date : 05/06/1999, 7:44:14

Completion	Date	Cur Oil	Cum Oil	Cur Gas	Cum Gas	Cur Wat	Cum Wat
JICARILLA 153	10/31/1998	217.85	217.85	63.00	63.00	0.00	0.00
Cum Oil 14409 1345 <u>14543</u>	11/30/1998	140	219.25	630.97	713.97	0.00	0.00
	12/31/1998	18.14	237.38	1,110.75	1,824.72	0.00	0.00
	01/31/1999	19.53	256.92	3,064.62	4,889.34	0.00	0.00
	02/28/1999	6.98	263.89	1,767.60	6,656.94	0.00	0.00
	03/31/1999	88.85	352.74	2,678.36	9,335.30	0.00	0.00
	04/30/1999	0.00	352.74	0.00	9,335.30	0.00	0.00
	05/31/1999	0.00	352.74	0.00	9,335.30	0.00	0.00
	11/30/1998	0.00	0.00	1,132.29	1,132.29	0.00	0.00
	12/31/1998	0.00	0.00	824.49	1,956.78	0.00	0.00
	01/31/1999	0.00	0.00	1,192.13	3,148.91	0.00	0.00
Pictured Cliffs	02/28/1999	0.00	0.00	995.07	4,143.98	0.00	0.00
	03/31/1999	0.00	0.00	1,062.72	5,206.70	0.00	0.00
	04/30/1999	0.00	0.00	0.00	5,206.70	0.00	0.00
	05/31/1999	0.00	0.00	0.00	5,206.70	0.00	0.00

Cum Oil
 3/31 Cum Gas
 662111
 1063
663174

FARMINGTON

ANNUAL PRODUCTION FOR 35953

PHS020M1

JICARILLA 153 12

BLANCO P.C. SOUTH (GAS) FIELD

PICTURED CLIFFS ZONE

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

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

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

PC DATE BBLS

PC DATE

MCF

DATE

BBLS

02 6912

01 6912

75836

=====

YEAR	OIL	OIL CUM	GAS	GAS CUM	WATER	WATER CUM
1990			20459	517686		12
1991			13493	531179		12
1992			36307	567486		12
1993			20808	588294		12
1994			17645	605939		12
1995			17679	623618		12
1996			14518	638136		12
1997			13890	652026		12
1998			10085	662111		12

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

00/00/00 00:00:00:0 D03 10/26/84

FARMINGTON

1998 MONTHLY PRODUCTION FOR 35953

PHS030M1

JICARILLA 153 12

BLANCO P.C. SOUTH (GAS) FIELD

PICTURED CLIFFS ZONE

DAYS =====			OIL =====		=====		GAS =====							
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F					01	1162	31	1216	15.025			
2	2	F					01	624	28	1216	15.025			
3	2	F					01	651	31	1216	15.025			
4	2	F					01	1056	25	1216	15.025			
5	2	F					01	1177	31	1216	15.025			
6	2	F					01	1149	30	1216	15.025			
7	2	F					01	1128	31	1216	15.025			
8	2	F					01	1113	31	1216	15.025			
9	2	F					01	951	30	1216	15.025			
10	2	F					01	1074	31	1231	15.025			
11														
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 35954

PHS020M1

JICARILLA 153 12

BASIN DAKOTA (PRORATED GAS) FIELD

DAKOTA ZONE

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

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

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

PC DATE BBLS

PC DATE

MCF

DATE

BBLS

02 6912 3677

01 6912

172971

=====

YEAR	OIL	OIL CUM	GAS	GAS CUM	WATER	WATER CUM
1990	117	12912	9908	1328230		257
1991	79	12991	9459	1337689		257
1992	272	13263	25602	1363291		257
1993	176	13439	23678	1386969		257
1994	180	13619	20640	1407609		257
1995	186	13805	26222	1433831		257
1996	289	14094	33797	1467628		257
1997	206	14300	32005	1499633		257
1998	109	14409	22626	1522259		257

POSITION CURSOR BY YEAR AND PRESS ENTER TO DISPLAY MONTHLY PRODUCTION

ENTER - CONTINUES ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

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PF9 - ANNUAL INJECTION DISPLAY

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00/00/00 00:00:00:0 D03 10/26/84

FARMINGTON

1998 MONTHLY PRODUCTION FOR 35954

PHS030M1

JICARILLA 153 12

BASIN DAKOTA (PRORATED GAS) FIELD

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	8		01	2343	31	1182	15.025				
2	2	F	28	02	6		01	1563	28	1182	15.025				
3	2	F	31	02	3		01	1445	31	1182	15.025				
4	2	F	27	02	24		01	3206	27	1182	15.025				
5	2	F	31	02	13		01	2076	31	1182	15.025				
6	2	F	30	02	20		01	3041	30	1182	15.025				
7	2	F	31	02	6		01	1774	31	1182	15.025				
8	2	F	31	02	3		01	1040	31	1182	15.025				
9	2	F	30	02	18		01	3469	30	1182	15.025				
10	2	F	31	02	8		01	2018	31	1182	15.025				
11	2	F					01	651		1182	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

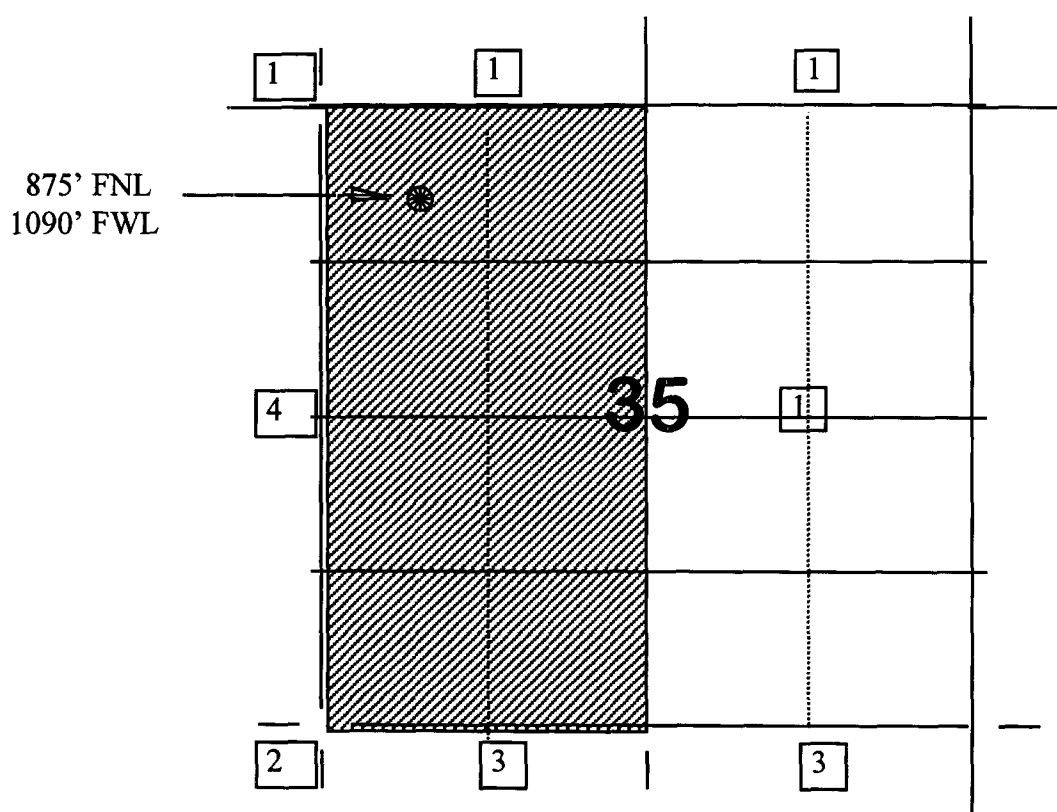
Jicarilla 153 #12

OFFSET OPERATOR/OWNER PLAT

Pictured Cliffs (NW/4) & Dakota (W/2) Formations

Commingle well

Township 26 North, Range 5 West



1) Burlington Resources

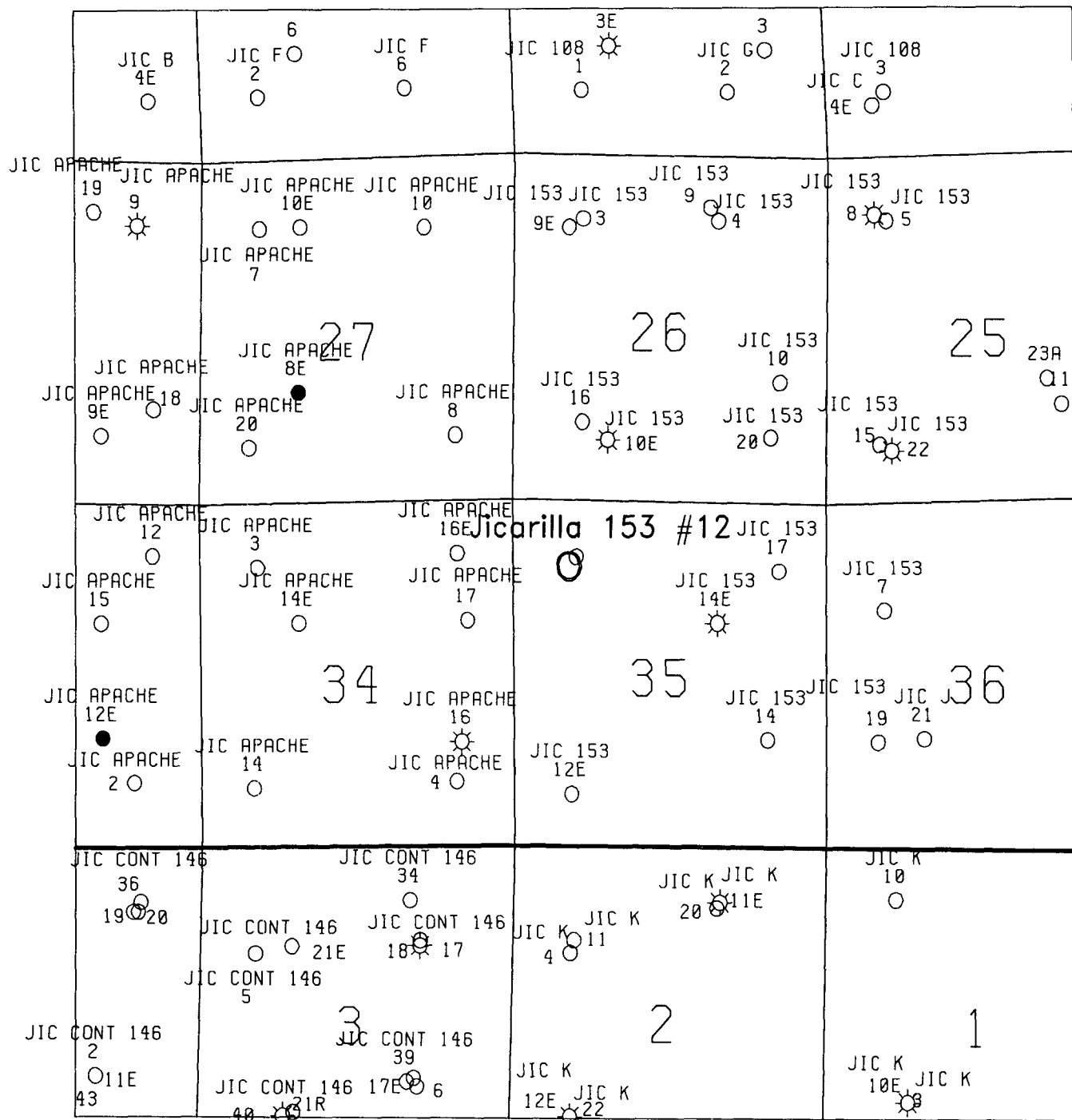
**2) Amoco Production Company
C/O Don Duhrkopf
501 West Lake Park Blvd.
Houston, TX 77079-2696**

3) Conoco Inc.

**Attn: Isabel H. Barron
P. O. Box 2197
Houston, TX 77252**

4) Marathon Oil Company

**c/o Joint Interest Rep.
Attn: Joseph J. Madron
P.O. Box 552
Midland, TX 79702**



Jicarilla 153 #12
Sec 35, T26N, R5W
Pictured Cliffs/Dakota