

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

Form C-107-A
Revised August 1999

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

APPROVAL PROCESS:

___ Administrative ___ Hearing

EXISTING WELLBORE

___X___ YES ___ NO

APPLICATION FOR DOWNHOLE COMMINGLING

BURLINGTON RESOURCES OIL & GAS COMPANY

PO BOX 4289, FARMINGTON, NM 87499

Operator

Address

LIVELY

18

M 01-26N-08W

SAN JUAN

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code API NO. 30-045-21326 Federal X, 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	OTERO CHACRA – 82329	BLANCO MESAVERDE – 72319	BASIN DAKOTA - 71599
2. Top and Bottom of Pay Section (Perforations)	WILL BE SUPPLIED UPON COMPLETION	WILL BE SUPPLIED UPON COMPLETION	WILL BE SUPPLIED UPON COMPLETION
3. Type of production (Oil or Gas)	GAS	GAS	GAS
4. Method of Production (Flowing or Artificial Lift)	FLOWING	FLOWING	FLOWING
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 281 psi (see attachment)	a. (Current) 427 psi (see attachment)	a. (Current) 1125 psi (see attachment)
	b. (Original) 844 psi (see attachment)	b. (Original) 1235 psi (see attachment)	b. (Original) 1973 psi (see attachment)
6. Oil Gravity (EAPI) or Gas BTU Content	BTU 1221	BTU 1304	BTU 1181
7. Producing or Shut-In?	SHUT-IN	SHUT-IN	SHUT-IN
Production Marginal? (yes or no) * 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 * If Producing, give date and oil/gas/ water rates of recent test (within 60 days)	NO	NO	YES
	Date: N/A Rates:	Date: N/A Rates:	Date: N/A Rates:
	Date: N/A Rates:	Date: N/A Rates:	Date: N/A Rates:
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION

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? ___X___ Yes ___ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ___ Yes ___ No
11. Will cross-flow occur? ___X___ 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. ___X___ Yes ___ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? ___X___ Yes ___ No
13. Will the value of production be decreased by commingling? ___ Yes ___X___ 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. ___X___ 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 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

Wayne Fletcher

TITLE PRODUCTION ENGINEER

DATE:

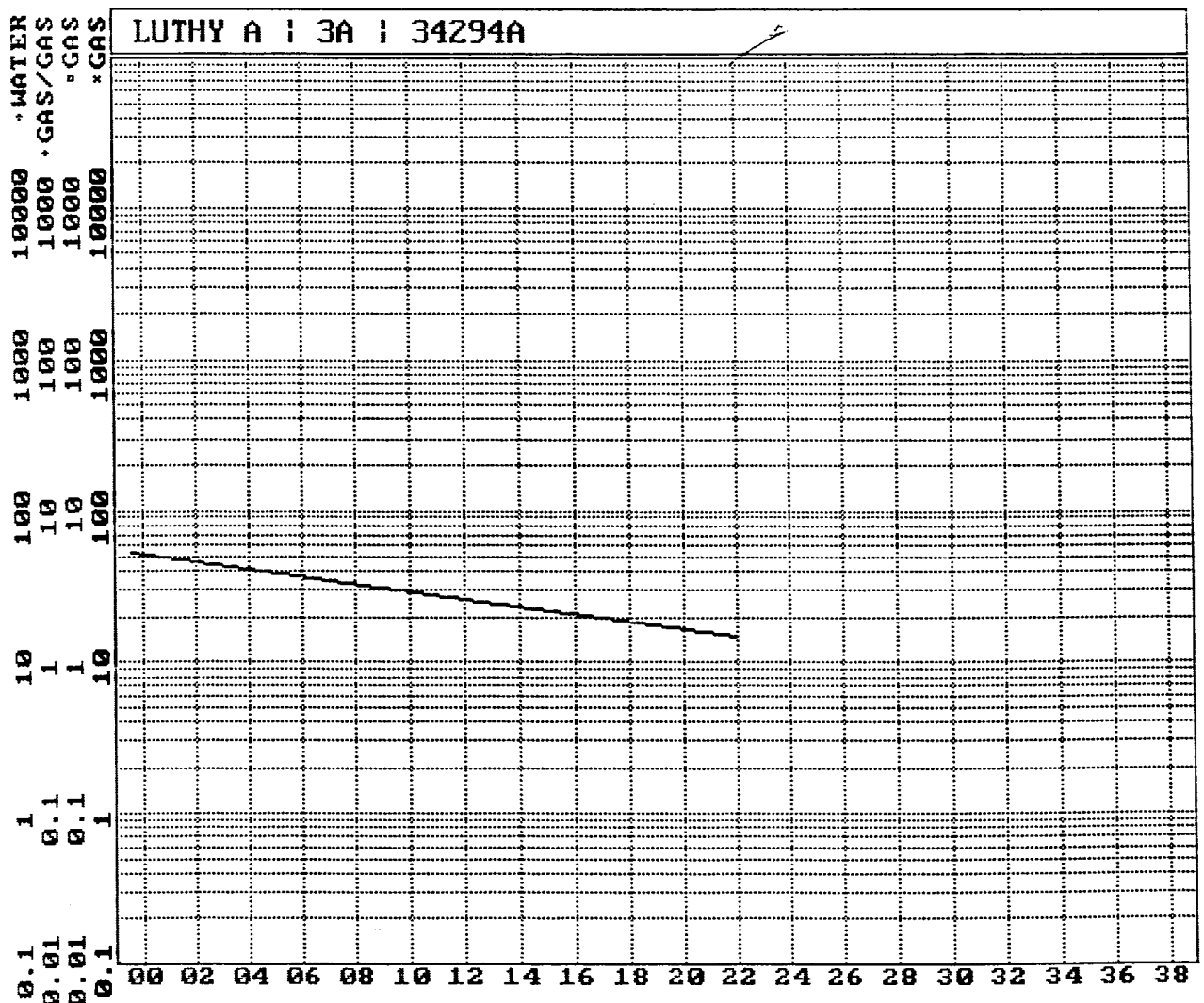
12-10-99

TYPE OR PRINT NAME B. WAYNE FLETCHER

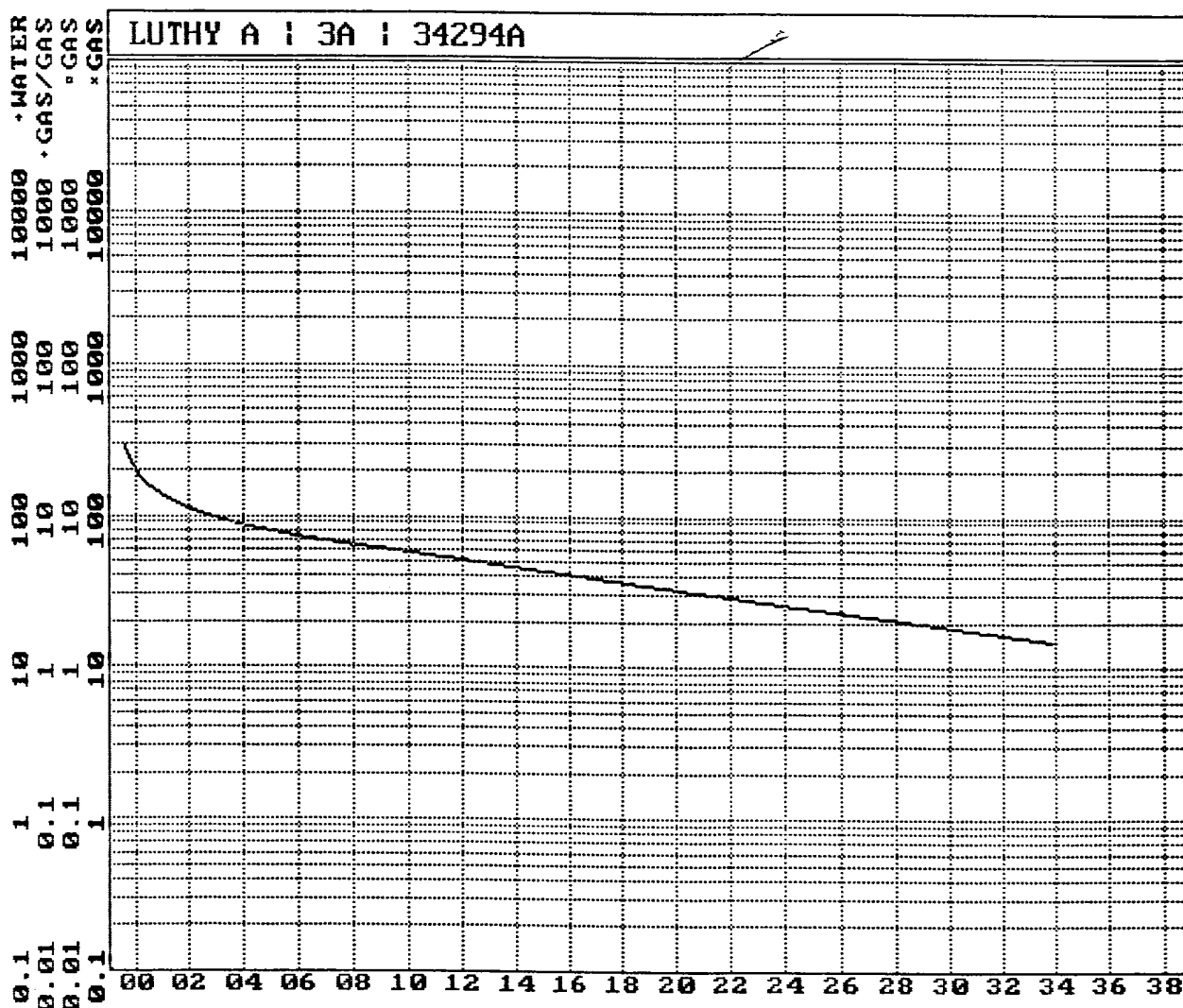
TELEPHONE NO. 505-326-9700

16						17 OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i> Signature <u>Peggy Cole</u> Printed Name <u>Regulatory Administrator</u> Title Date
						18 SURVEYOR CERTIFICATION <i>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 belief.</i> Date of Survey Signature and Seal of Professional Surveyer: Certificate Number

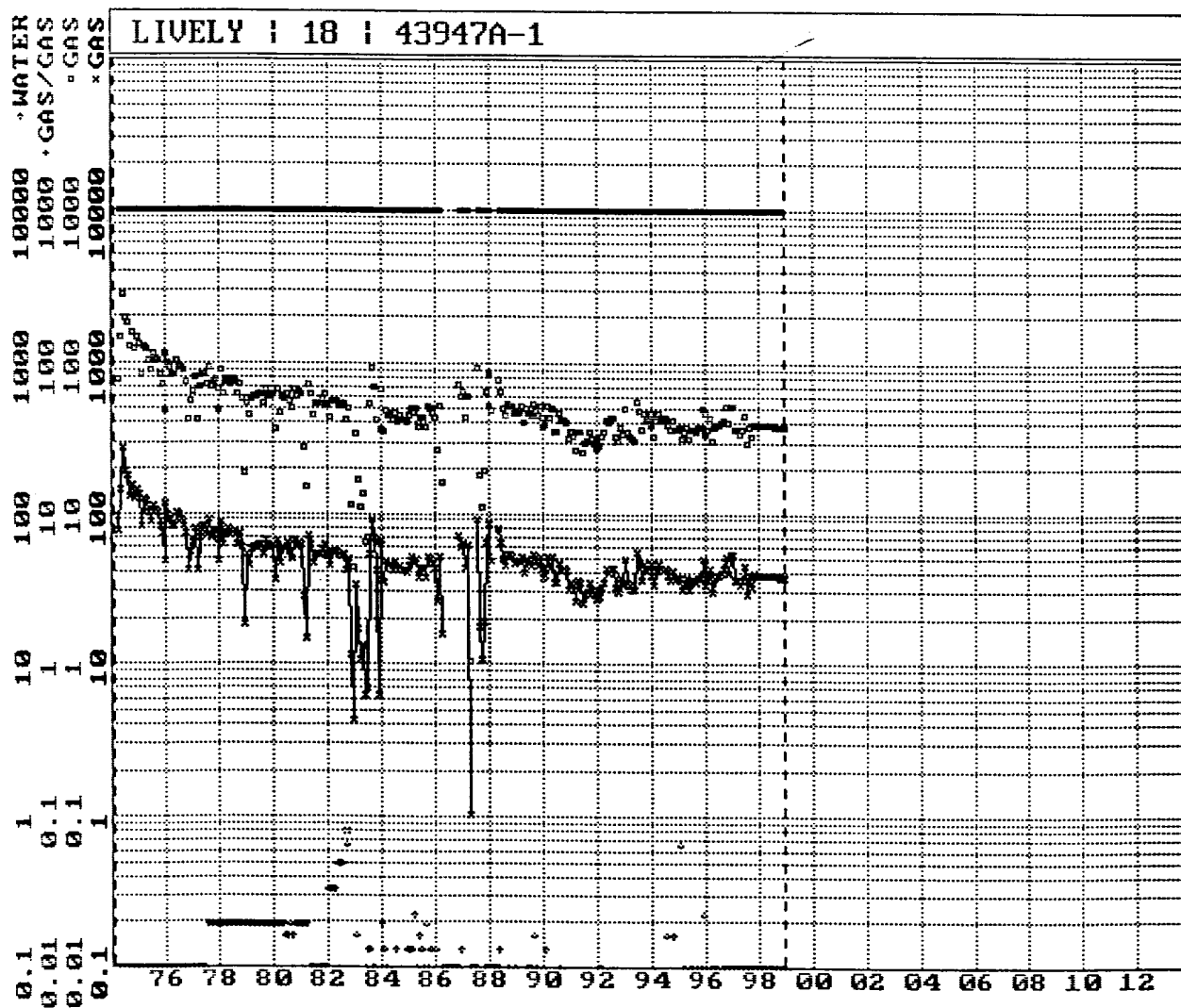
Lively #18
Expected Production
Chacra Formation



Lively #18
Expected Production
Mesaverde Formation



Lively #18
Actual Production
Dakota Formation



Lively #18
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Chacra		Mesaverde	
<u>CH-Current</u>		<u>MV-Current</u>	
GAS GRAVITY	0.716	GAS GRAVITY	0.769
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.82	%N2	0.6
%CO2	0.37	%CO2	0.45
%H2S	0	%H2S	0
DIAMETER (IN)	2.375	DIAMETER (IN)	2.375
DEPTH (FT)	4310	DEPTH (FT)	4888
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	137
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	252	SURFACE PRESSURE (PSIA)	372
BOTTOMHOLE PRESSURE (PSIA)	280.9	BOTTOMHOLE PRESSURE (PSIA)	426.5
<u>CH-Original</u>		<u>MV-Original</u>	
GAS GRAVITY	0.716	GAS GRAVITY	0.769
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.82	%N2	0.6
%CO2	0.37	%CO2	0.45
%H2S	0	%H2S	0
DIAMETER (IN)	2.375	DIAMETER (IN)	2.375
DEPTH (FT)	4310	DEPTH (FT)	4888
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	137
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	749	SURFACE PRESSURE (PSIA)	1053
BOTTOMHOLE PRESSURE (PSIA)	843.9	BOTTOMHOLE PRESSURE (PSIA)	1234.7

Lively #18
 Bottom Hole Pressures
 Flowing and Static BHP
 Cullender and Smith Method
 Version 1.0 3/13/94

Dakota	
<u>DK-Current</u>	
GAS GRAVITY	<u>0.699</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.63</u>
%CO2	<u>1.04</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>1.25</u>
DEPTH (FT)	<u>6575</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>137</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>936</u>
BOTTOMHOLE PRESSURE (PSIA)	1124.6
<u>DK-Original</u>	
GAS GRAVITY	<u>0.699</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.63</u>
%CO2	<u>1.04</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>1.25</u>
DEPTH (FT)	<u>6575</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>137</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>1613</u>
BOTTOMHOLE PRESSURE (PSIA)	1972.7

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Page No.: 1
Print Time: Tue Feb 09 11:32:56 1999
Property ID: 10283
Property Name: NAVAJO INDIAN B | 3 | 32088C-1
Table Name: K:\ARIES\RR99PDP\TEST.DBF

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Property ID: 10283
Property Name: NAVAJO INDIAN B | 3 | 32088C-1
Table Name: K:\ARIES\RR99PDP\TEST.DBF
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Property Name: NAVAJO INDIAN B | 3 | 32088C-1
Table Name: K:\ARIES\RR99PDP\TEST.DBF
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Table Name: K:\ARIES\RR99PDP\TEST.DBF

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--DATE--   ---CUM GAS-- M SIWHP  
■■■■■■■■■ ■■■■■■Mcf■■■■■ ■■■Psi■■■
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04/13/59	0	749.0
05/16/69	0	361.0
09/25/71	188761	292.0
08/17/72	197005	331.0
08/17/74	219077	271.0
05/17/76	239124	235.0
05/18/78	255848	300.0
04/08/80	270767	210.0
04/03/85	292048	290.0
02/17/88	293824	333.0
11/02/90	305416	286.0
03/29/92	311632	252.0

Lively #18

Chakra Offset

Page No.: 1
Print Time: Tue Feb 09 10:27:16 1999
Property ID: 3252
Property Name: LUTHY A | 4 | 54425A-1
Table Name: K:\ARIES\RR99PDP\TEST.DBF

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

01/20/86	0	1053.0
05/17/86	11527	834.0
12/15/87	130040	604.0
03/15/88	147939	484.0
07/12/89	202583	653.0
09/29/90	247501	510.0
06/21/91	284878	433.0
12/16/91	308334	421.0
07/06/93	379995	372.0

Lively #18

Mesaverde Offset

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Page No.: 1
Print Time: Tue Feb 09 11:04:33 1999
Property ID: 1130
Property Name: LIVELY | 18 | 43947A-1
Table Name: K:\ARIES\RR99PDP\TEST.DBF

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02/09/74	0	2398.0
05/25/74	6823	1712.0
05/22/75	60672	1032.0
04/22/76	91141	932.0
05/11/77	120819	932.0
05/01/79	169599	857.0
11/09/82	238516	773.0
10/17/83	249154	833.0
08/09/85	277765	813.0
08/31/88	315998	709.0
05/07/90	346556	657.0

Existing Dakota

