

BURLINGTON RESOURCES

SAN JUAN DIVISION

June 24, 1997

SENT FEDERAL EXPRESS

Mr. William LeMay
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: McClanahan #14E
1620'FNL, 810'FEL, Section 23, T-28-N, R-10-W
30-045-23913

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Chacra and Dakota in the subject well.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas Company is submitting the following for your approval of this commingling:

1. Form C107A - Application for Downhole Commingling;
2. C-102 plat for each zone showing its spacing unit and acreage dedication;
3. Production curves for Chacra and Dakota;
4. Notification list of offset operators;
5. Shut in wellhead pressure and calculated down hole pressure of surrounding wells;
6. Nine-section plats for the Chacra and Dakota.

Working, overriding and royalty interests are identical in the commingled zones.

We will consult with the Supervisor of the Aztec District Office of the New Mexico Oil Conservation Division to establish an allocation formula.

Please let me know if you require additional data.

Sincerely,



Peggy Bradfield

Regulatory/Compliance Administrator

xc: Bureau of Land Management - hand delivered

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

Form C-107-A New 3-12-96

APPROVAL PROCESS :

X Administrative ___ Hearing

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

X YES ___ NO

BURLINGTON RESOURCES OIL & GAS COMPANY

PO Box 4289, Farmington, NM 87499

Operator

Address

McCLANAHAN

14E Unit H, Sec. 23, T028N, R10W

San Juan County

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 18577 API NO30-045-23913 Federal X State (and/or) Fee

Table with 4 columns: The following facts are submitted in support of downhole commingling, Upper Zone, Intermediate Zone, Lower Zone. Rows include Pool Name, Top and Bottom of Pay Section, Type of production, Method of Production, Bottomhole Pressure, Oil Gravity, Producing or Shut-In?, Production Marginal?, Fixed Percentage Allocation Formula.

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, attach 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. Have all offset operators been given written notice of the proposed downhole commingling? X 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 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 Kevin L. Midkiff TITLE Operations Engineer DATE 06-23-97

TYPE OR PRINT NAME Kevin L. Midkiff TELEPHONE NO. (505) 326-9700

All distances must be from the outer boundaries of the Section.

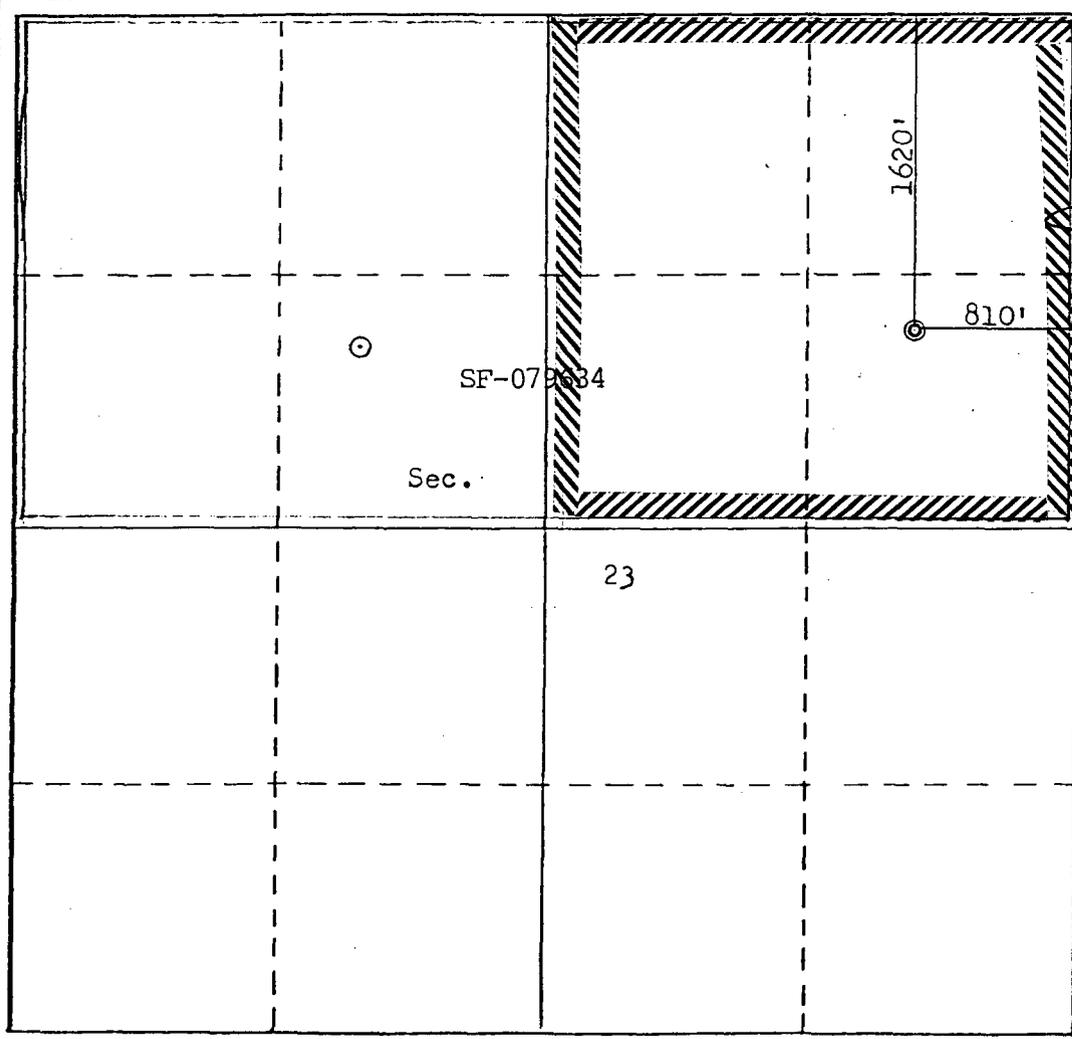
Operator SOUTHLAND ROYALTY COMPANY			Lease McCLANAHAN		Well No. 14-E
Unit Letter H	Section 23	Township 28N	Range 10W	County San Juan	
Actual Footage Location of Well: 1620 feet from the North line and 810 feet from the East line					
Ground Level Elev. 5708	Producing Formation Dakota - Mesa Verde /Ch		Pool Basin - Blanco	Dedicated Acreage: 320 / 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 working 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.) _____

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 Commission.



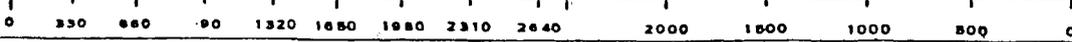
CERTIFICATION

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

[Signature]
Name
District Production Manager
Position
Southland Royalty Company
Company
October 24, 1979
Date

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
October 29, 1979
Registered Professional Engineer
and State Surveyor
[Signature]
Fred B. Kerr Jr.
Certificate No. 38307
STATE OF NEW MEXICO



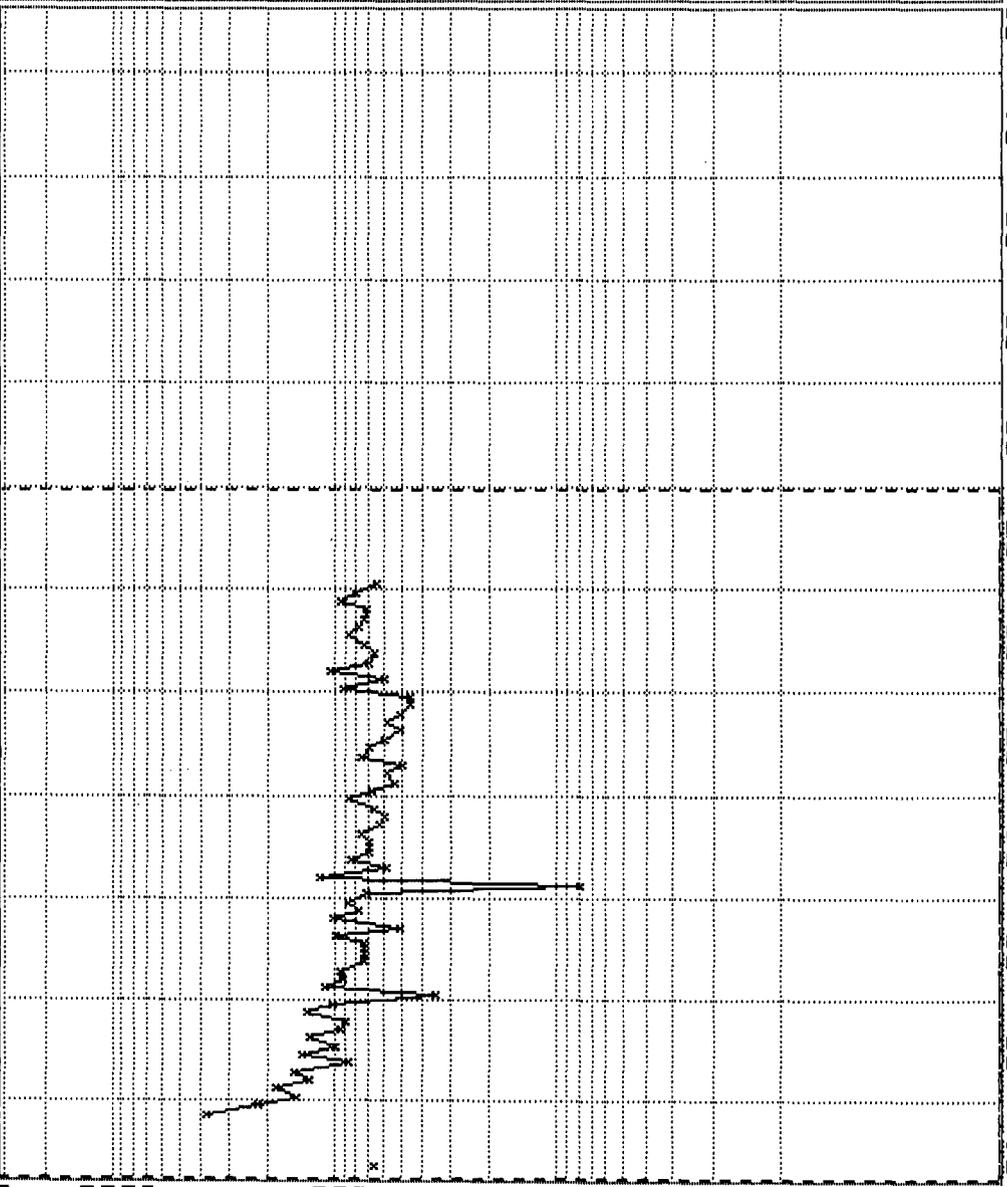
Prop 83 *

MCCLANAHAN 14E 1 46371B-CHACRA

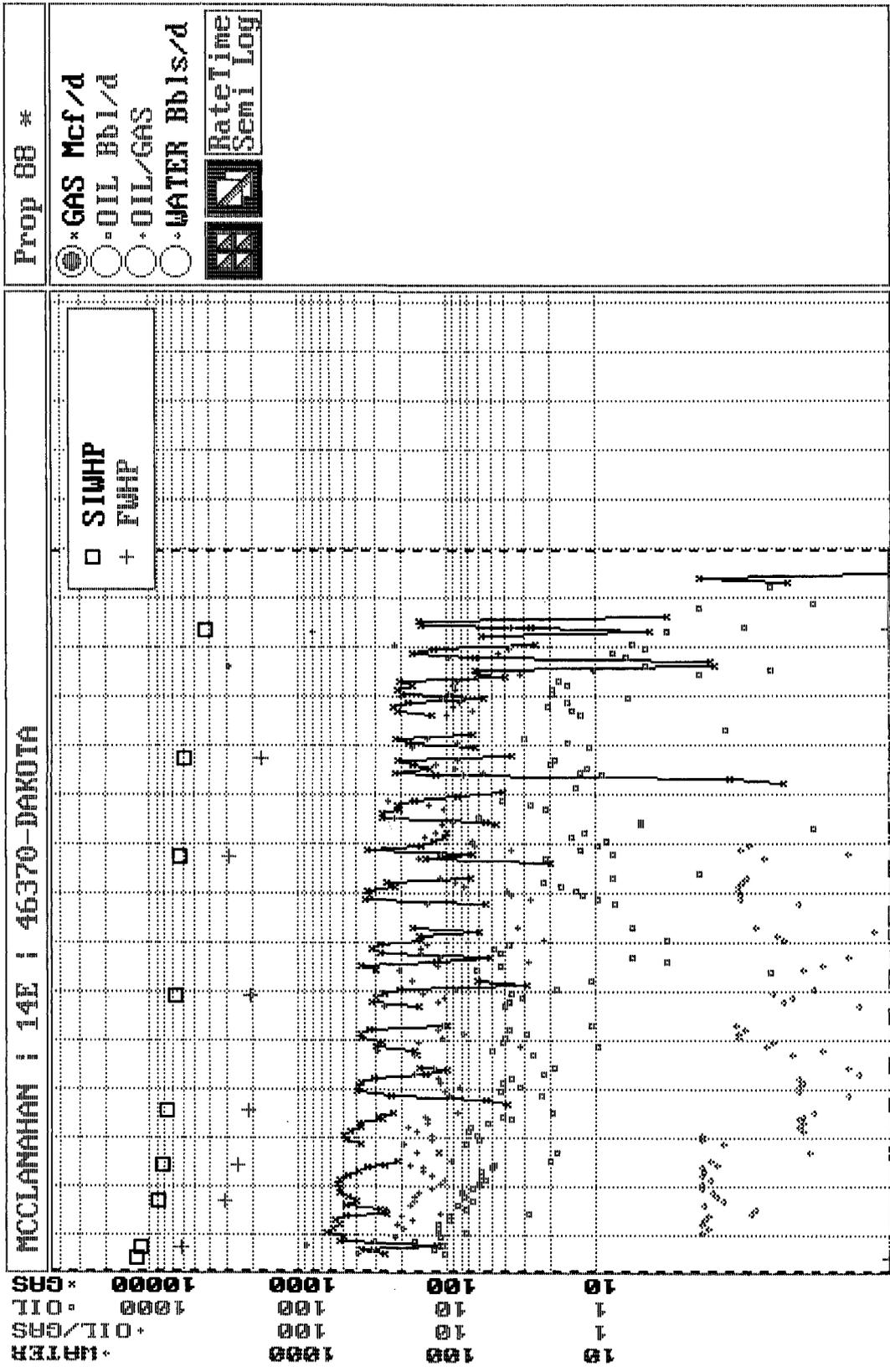
1000 · WATER
100 · OIL/GAS
100 · OIL
1000 · GAS

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

RateTime
Semi Log



Major = GAS



Prop 88 *

- * GAS Mcf/d
- OIL Bbl/d
- OIL/GAS
- WATER Bbls/d
- ▣ RateTime
- ▣ Semi Log

□ SIWHP
+ FWHP

Major = GAS

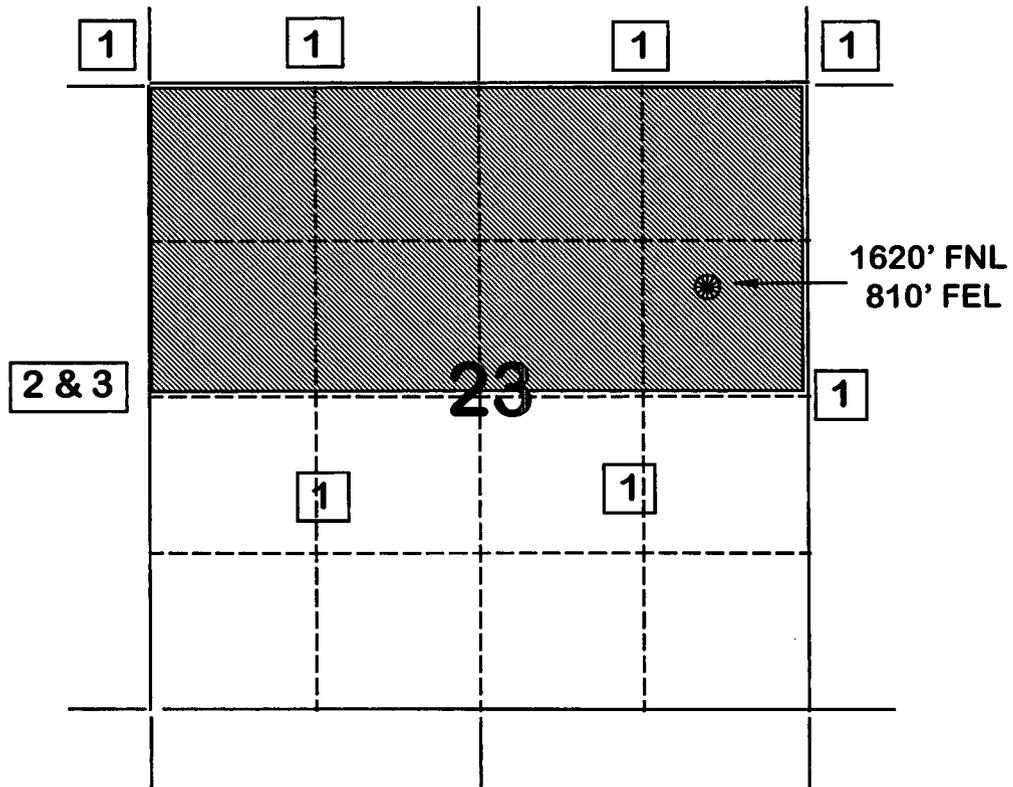
BURLINGTON RESOURCES OIL AND GAS COMPANY

McClanahan #14E

OFFSET OPERATOR \ OWNER PLAT

Chacra (NE/4)/Dakota (N/2) Formations Commingle Well

Township 28 North, Range 10 West



- 1) Burlington Resources Oil and Gas Company
- 2) Universal Resources Company
1331 17th Street, Suite 300
Denver, CO 80202
- 3) Amoco Production Company
Attn: Bruce Zimney
P.O. Box 800
Denver, CO 80201

McClanahan #14E
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Dakota	Chacra																																																
<u>DK-Current</u>	<u>Chacra-Current</u>																																																
<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">GAS GRAVITY</td><td style="text-align: right; border-bottom: 1px solid black;">0.655</td></tr> <tr><td>COND. OR MISC. (C/M)</td><td style="text-align: right; border-bottom: 1px solid black;">C</td></tr> <tr><td>%N2</td><td style="text-align: right; border-bottom: 1px solid black;">0.4</td></tr> <tr><td>%CO2</td><td style="text-align: right; border-bottom: 1px solid black;">0.24</td></tr> <tr><td>%H2S</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>DIAMETER (IN)</td><td style="text-align: right; border-bottom: 1px solid black;">1.5</td></tr> <tr><td>DEPTH (FT)</td><td style="text-align: right; border-bottom: 1px solid black;">6301</td></tr> <tr><td>SURFACE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">60</td></tr> <tr><td>BOTTOMHOLE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">152</td></tr> <tr><td>FLOWRATE (MCFPD)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>SURFACE PRESSURE (PSIA)</td><td style="text-align: right; border-bottom: 1px solid black;">420</td></tr> <tr><td> BOTTOMHOLE PRESSURE (PSIA)</td><td style="text-align: right; border-bottom: 1px solid black;">486.2</td></tr> </table>	GAS GRAVITY	0.655	COND. OR MISC. (C/M)	C	%N2	0.4	%CO2	0.24	%H2S	0	DIAMETER (IN)	1.5	DEPTH (FT)	6301	SURFACE TEMPERATURE (DEG F)	60	BOTTOMHOLE TEMPERATURE (DEG F)	152	FLOWRATE (MCFPD)	0	SURFACE PRESSURE (PSIA)	420	 BOTTOMHOLE PRESSURE (PSIA)	486.2	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">GAS GRAVITY</td><td style="text-align: right; border-bottom: 1px solid black;">0.66</td></tr> <tr><td>COND. OR MISC. (C/M)</td><td style="text-align: right; border-bottom: 1px solid black;">C</td></tr> <tr><td>%N2</td><td style="text-align: right; border-bottom: 1px solid black;">0.57</td></tr> <tr><td>%CO2</td><td style="text-align: right; border-bottom: 1px solid black;">0.24</td></tr> <tr><td>%H2S</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>DIAMETER (IN)</td><td style="text-align: right; border-bottom: 1px solid black;">1.5</td></tr> <tr><td>DEPTH (FT)</td><td style="text-align: right; border-bottom: 1px solid black;">2878</td></tr> <tr><td>SURFACE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">60</td></tr> <tr><td>BOTTOMHOLE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">101</td></tr> <tr><td>FLOWRATE (MCFPD)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>SURFACE PRESSURE (PSIA)</td><td style="text-align: right; border-bottom: 1px solid black;">165</td></tr> <tr><td> BOTTOMHOLE PRESSURE (PSIA)</td><td style="text-align: right; border-bottom: 1px solid black;">176.6</td></tr> </table>	GAS GRAVITY	0.66	COND. OR MISC. (C/M)	C	%N2	0.57	%CO2	0.24	%H2S	0	DIAMETER (IN)	1.5	DEPTH (FT)	2878	SURFACE TEMPERATURE (DEG F)	60	BOTTOMHOLE TEMPERATURE (DEG F)	101	FLOWRATE (MCFPD)	0	SURFACE PRESSURE (PSIA)	165	 BOTTOMHOLE PRESSURE (PSIA)	176.6
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3/25/97: Chacra 24 hour SICP: 165#.

DAKOTA

Organize Data ScreenGraph Economics Report Plot Utility Quit

Browsing: MCCLANAHAN | 14E | 46370-1 **DAKOTA** Property No.: 88

Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/9/585

Item: 2/4/33 Name: DATE Type: Date Len: 8/32/203

<u>--DATE--</u>	<u>TIME-</u>	<u>---CUM GAS--</u>	<u>M SIWHP</u>
		Mcf	Psi
07/01/80		0	1223.0
10/01/80		23237	1140.0
09/16/81		183704	885.0
06/09/82		307048	839.0
07/24/83		419475	784.0
12/04/85		582051	677.0
09/28/88		714451	632.0
10/03/90		809585	586.0
05/05/93	00005	895086	420.0

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table
F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

FDG055M4 S004
START OF DATA
DP NO: 46370_

DAKOTA

WELL PRODUCTION 8/8'S VOLUME

06/17/97 10:51:05

S

DATE	HOURS ON	-OIL PRODN- (BOPD)	-GAS PRODN- (MCFD MCFM)	-WATER PRODN- (BWPD BWPM)
06/15/97	0.0	0.00	0 0	0.00 0.00
06/14/97	0.0	0.00	0 0	0.00 0.00
06/13/97	0.0	0.00	0 0	0.00 0.00
06/12/97	0.0	0.00	0 0	0.00 0.00
06/11/97	0.0	0.00	0 0	0.00 0.00
06/10/97	0.0	0.00	0 0	0.00 0.00
06/09/97	0.0	0.00	0 0	0.00 0.00
06/08/97	0.0	0.00	0 0	0.00 0.00
06/07/97	0.0	0.00	0 0	0.00 0.00
06/06/97	0.0	0.00	0 0	0.00 0.00
06/05/97	0.0	0.00	0 0	0.00 0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF12=MAIN MENU
B MY JOB

PF6=NRI
ENTER=BACKWARDS
LU #6

PF10=BROWSE MENU

PF11=INQ/UPDATE MENU
PF24=HELP

FDG055M4 S004
START OF DATA
DP NO: 46371b

CHACRA

WELL PRODUCTION 8/8'S VOLUME

06/17/97 10:51:15

S

DATE	HOURS ON	-OIL PRODN- (BOPD)	-GAS PRODN- (MCFD MCFM)	-WATER PRODN- (BWPD BWPM)
06/15/97	24.0	0.00	67 1010	0.00 0.00
06/14/97	24.0	0.00	67 943	0.00 0.00
06/13/97	24.0	0.00	67 876	0.00 0.00
06/12/97	24.0	0.00	67 809	0.00 0.00
06/11/97	24.0	0.00	70 742	0.00 0.00
06/10/97	24.0	0.00	70 672	0.00 0.00
06/09/97	24.0	0.00	70 602	0.00 0.00
06/08/97	24.0	0.00	70 532	0.00 0.00
06/07/97	24.0	0.00	70 462	0.00 0.00
06/06/97	24.0	0.00	70 392	0.00 0.00
06/05/97	24.0	0.00	70 322	0.00 0.00

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✕24 ZACHRY ✕35 ZACHRY ✕10-E CAIN ✕24 CAIN ✕16 CAIN 15 ✕36 CAIN ✕41-E CAIN	✕25 ZACHRY 1 ✕55 ZACHRY ZACHRY ✕56 ZACHRY ✕11 CAIN-D ✕5 CAIN ✕19-E MC CLANAHAN ✕22 MC CLANAHAN ✕19-E MC CLANAHAN ✕20-E MC CLANAHAN 14 ✕550 MC CLANAHAN ✕551 MC CLANAHAN	✕36 ZACHRY ✕41 ZACHRY ✕54 ZACHRY ✕41 ZACHRY ✕5 MCCLANAHAN ✕2 MCCLANAHAN ✕5-Y MCCLANAHAN ✕20-E MC CLANAHAN 13 ✕20 MCCLANAHAN-D	✕3 REID ✕26 REID ✕15 REID ✕16 REID ✕17 REID
✕1-E DAVIDSON GAS COM ODAVIDSON H #500 ✕1 KUTZ FEDERAL C 22 ✕1 TURNER KUTZ ✕1-E KUTZ	✕4-E MCCLANAHAN ✕23 MCCLANAHAN-A ✕23 MCCLANAHAN-A ✕2-E MCCLANAHAN-A 23 ✕2 SULLIVAN ✕2 WHITE-SULLIVAN ✕2-E MCCLANAHAN-A	✕16-E MCCLANAHAN ✕16-E MCCLANAHAN ✕16-E MCCLANAHAN 24 ✕16-E MCCLANAHAN-D	✕17 MCCLANAHAN-D ✕551 MC CLANAHAN ✕17 REID ✕17-E MCCLANAHAN ✕18 MCC LANAHAN
✕2 KUTZ DEEP TEST C ✕1 KUTZ FEDERAL C ✕1 NOTE COMS 27 502 ODAVIDSON 502 27 ✕1-E KUTZ DEEP TEST C ✕1-E KUTZ DEEP TEST C	✕17 OMLER-A ✕17 OMLER-A ✕5 OMLER ✕6 OMLER X ✕15 OMLER-A ✕1 OMLER-A 26 ✕1 OMLER A ✕7 OMLER ✕3 OMLER-A ✕3-E OMLER-A	✕7 OMLER ✕6 OMLER ✕5-E OMLER-A ✕5 OMLER-A 25 ✕500 OMLER ✕8 OMLER A ✕5 OMLER ✕4 OMLER A ✕1-E OMLER-A	✕4 OMLER-A ✕8 OMLER ✕1-E OMLER-A

McClanahan 14E
Sec23H T28N R10W
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