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 :
_X_ Administrative ___Hearing

EXISTING WELLBORE
_x_ YES ___ NO

Burlington Resources Oil & Gas Company — Operator
PO Box 4289, Farmington, NM 87499 — Address

Helms Federal — Lease
1 — Well No.
K 22-30-10 — Unit Ltr. - Sec - Twp - Rge
San Juan — County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. _14538_____ Property Code _7108___ API NO. _30-045-09330 _____ Federal ___x___ , State _____, (and/or) Fee ___x_____

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)	4508-5416'		7207-7417'
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. 628 psi (calc) see attached	a.	a. 964 psi (electronic pressure bomb) - see attached
	(Original) b. 1005 psi (calc) see attached	b.	b. 2335 psi (calc) - see attached
6. Oil Gravity (°API) or Gas BTU Content	BTU 1191		BTU 1035
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	yes		yes
* If Shut-In 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: n/a Rates:	Date: Rates:	Date: n/a Rates:
* If Producing, give data and oil/gas/water water of recent test (within 60 days)	Date: 3-1-97 Rates: 29 mcfd; 0.3 bopd	Date: Rates:	Date: 3-1-97 Rates: 53 mcfd; 0 bopd
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: % Gas: % will be supplied upon completion	Oil: % Gas: %	Oil: % Gas: % will be supplied upon completion

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OIL CON. DIV.
DIST. 3

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submi 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-flowec 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 Mary Ellen Lutey TITLE Product ion Engineer _____ DATE ___4/11/97_____

TYPE OR PRINT NAME __ Mary Ellen Lutey____ TELEPHONE NO. (505) 326-9700_____

Form C-128 (6-57)

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

NOVEMBER 2, 1964

Section A

Lease FEDERAL HELMS

Operator SOUTHERN UNION GAS COMPANY

Well No. 1 Unit Letter K Section 22 Township 30 NORTH Range 10 WEST NMPM

Located 1800 Feet From SOUTH Line, 1695 Feet From EAST 323.84 Line

County SAN JUAN Dedicated Acreage 251 Acres

Name of Producing Formation DAKOTA & MESAVERDE Pool BASIN DAKOTA & BLANCO MESAVERDE

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
   Yes _____ No _____
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes _____ No _____. If answer is "yes", Type of Consolidation.
3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner	Land Description

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.

SOUTHERN UNION PRODUCTION COMPANY

(Operator)

Gilbert D. Holland, Jr.

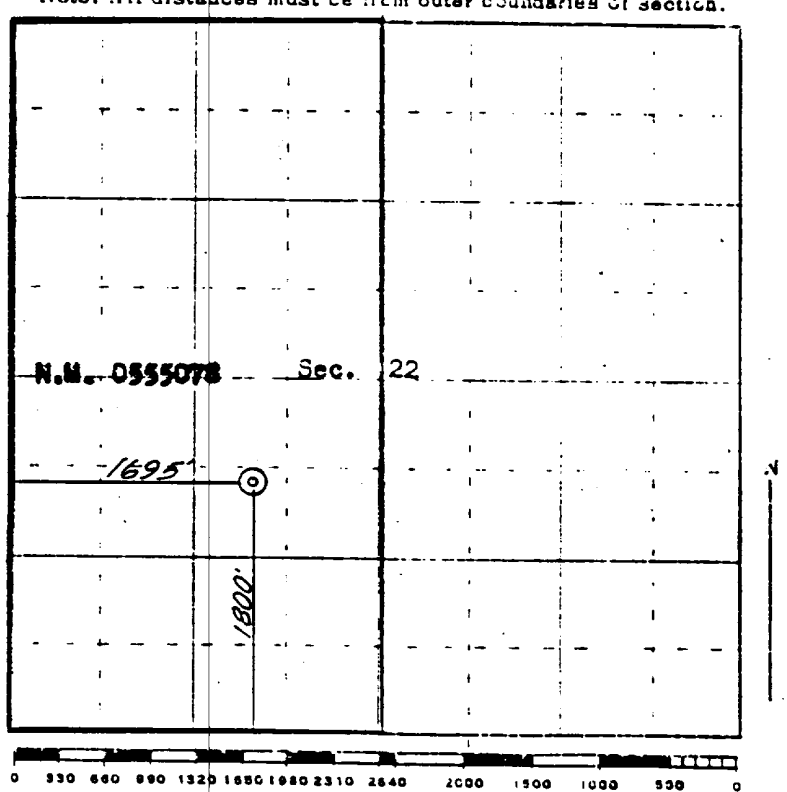
GILBERT D. HOLLAND, JR.

P. O. Box 808 (Address)

FARMINGTON,

NEW MEXICO

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



Scale 4 inches equal 1 mile

(Seal)

Farmington, New Mexico

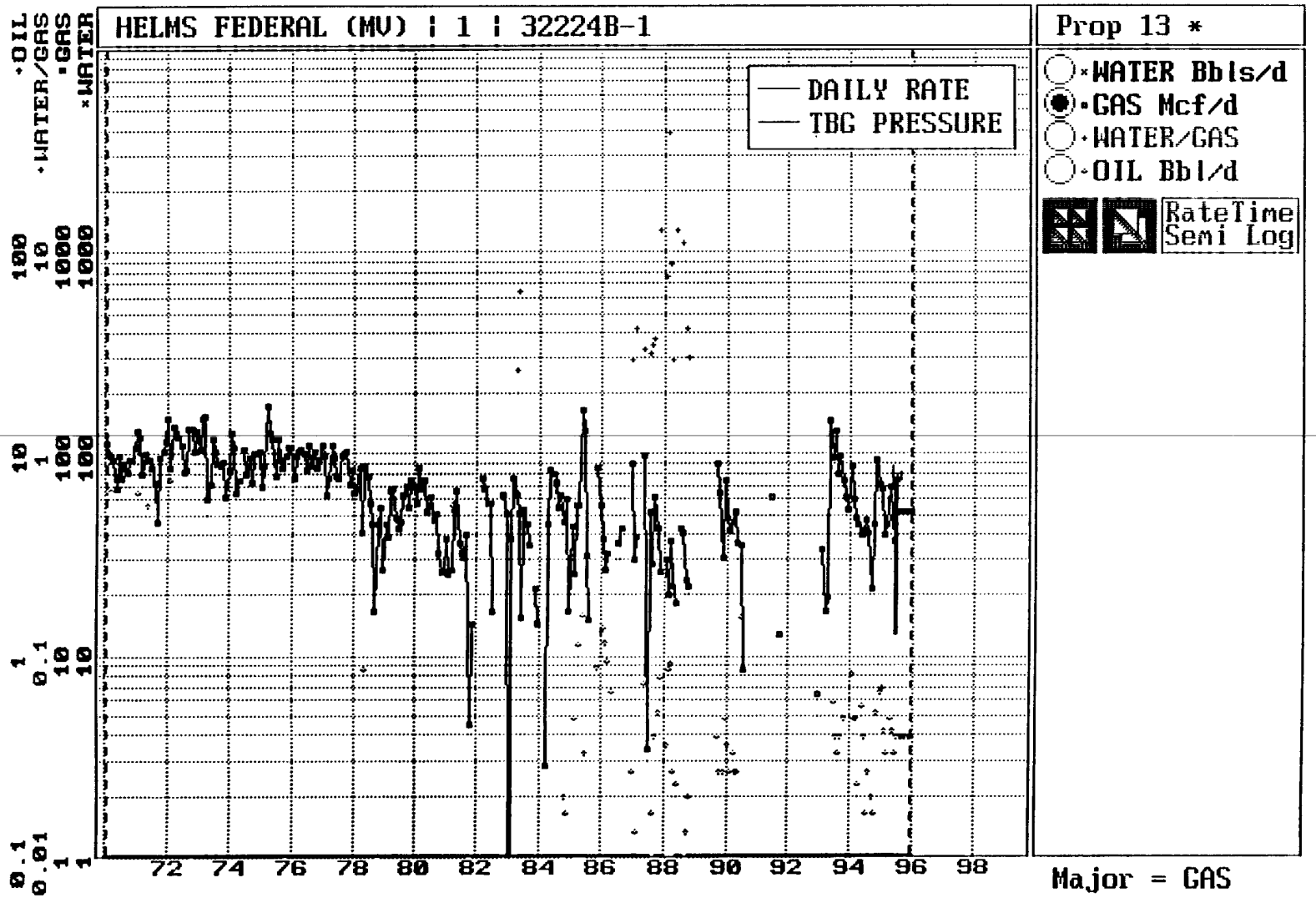
This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

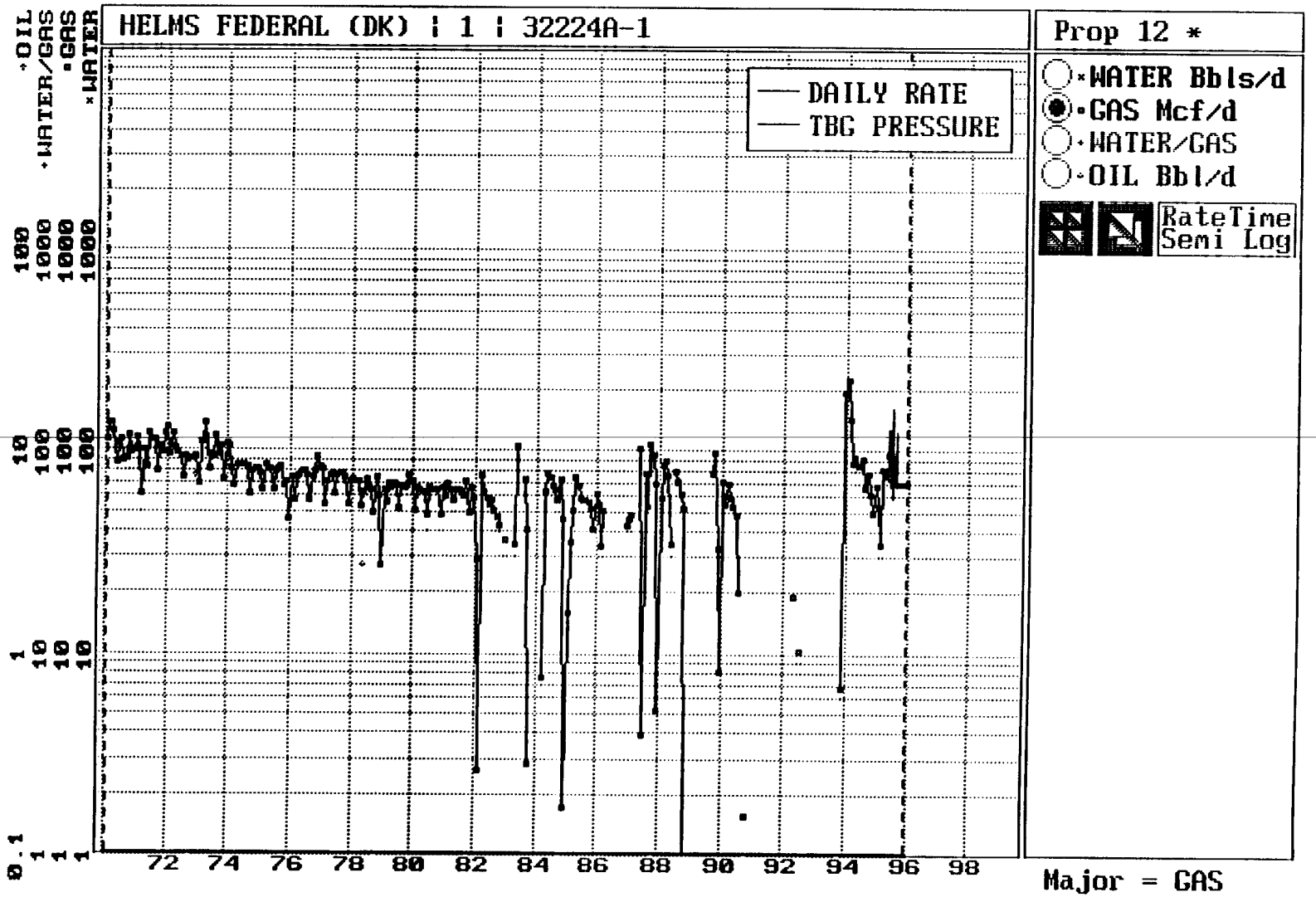
Date Surveyed October 30, 1964

James P. Leese

Registered Professional Engineer and or Land Surveyor

James P. Leese, New Mex. Reg. No. 1463


HELMS FEDERAL (MV) | 1 | 32224B-1
DAILY RATE
TBG PRESSURE
Prop 13 *
•WATER Bbls/d
•GAS Mcf/d
•WATER/GAS
•OIL Bbl/d
RateTime
Semi Log
•OIL
•WATER/GAS
•GAS
•WATER
72 74 76 78 80 82 84 86 88 90 92 94 96 98
Major = GAS


HELMS FEDERAL (DK) ¦ 1 ¦ 32224A-1
DAILY RATE
TBG PRESSURE
Prop 12 *
×WATER Bbls/d
•GAS Mcf/d
·WATER/GAS
·OIL Bbl/d
RateTime
Semi Log
·OIL
·WATER/GAS
•GAS
×WATER
100 1000 1000 1000
10 100 100 100
1 10 10 10
0.1 1 1 1
72 74 76 78 80 82 84 86 88 90 92 94 96 98
Major = GAS

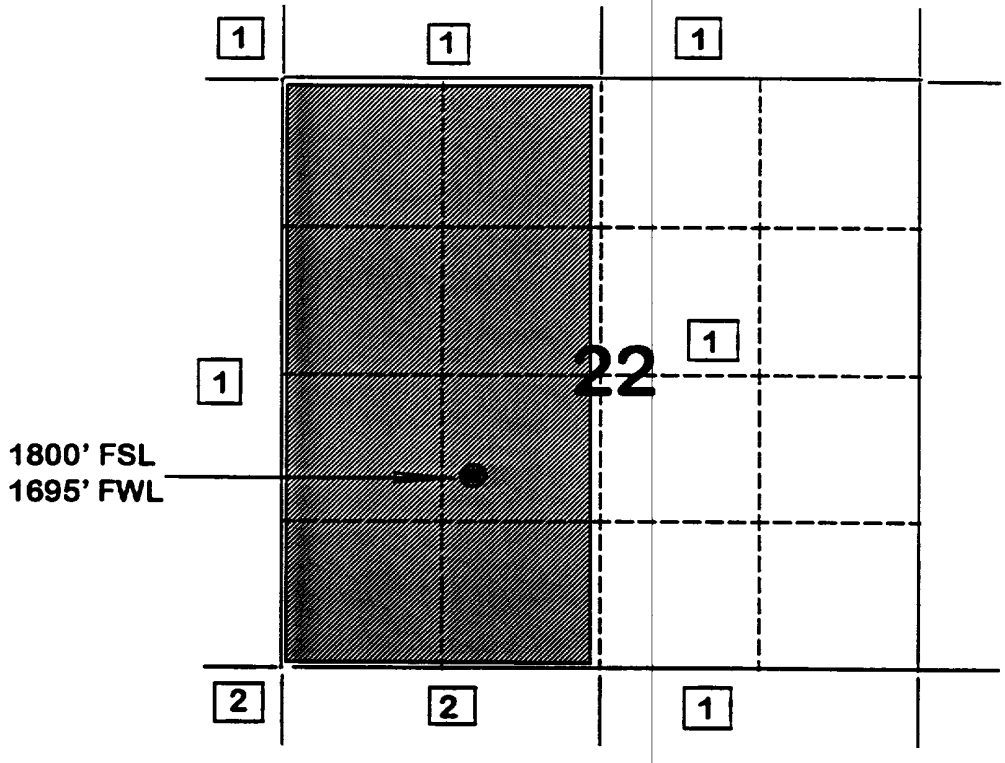
BURLINGTON RESOURCES OIL AND GAS COMPANY

HELMS FEDERAL #1

OFFSET OPERATOR \ OWNER PLAT

Mesaverde / Dakota Formations Commingle Well

Township 30 North, Range 10 West

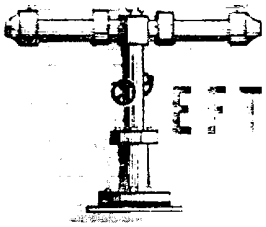


1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.
2) Amoco Production Company
   Bruce Zimney
   P.O. Box 800
   Denver, CO 80201

FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD
VERSION 1.0 3/13/94

GAS GRAVITY	0.62
COND. OR MISC. (C/M)	C
%N2	0.14
%CO2	2.04
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	7010
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1977
BOTTOMHOLE PRESSURE (PSIA)	2334.8

HELMS FEDERAL #1 DAKOTA - (ORIGINAL)



TEFTELLER, INC.
reservoir engineering data

FARMINGTON, NEW MEXICO / MIDLAND, TEXAS
GRAND JUNCTION, COLORADO

P. O. Box 1198
Farmington, New Mexico 87499
(505) 325-1731

Farmington Fax (505) 325-1148
Midland Fax (915) 682-5329
Grand Junction Fax (303) 241-7634

March 31, 1997

Burlington Resources Oil and Gas Company
P.O. Box 4289
Farmington, NM 87499

Attn: Ms Mary Ellen Lutey

Re: Report No. 2-29890-EP
Helms Federal #1

Dear Ms. Lutey:

Results of data from electronic instrument attached to bridge plug set @ 5500' as follows:

Pressure stabilized @ 156.5 psi extrapolated to mid point of perforations of 7312' using 2% KCL water gradient.

Measured pressure @ 5500'	=	156.5 psi
.440 psi/ft KCL water gradient - 1812'	=	797.3 psi
Pressure @ mid-perfs - 7312'	=	963.8 psi

Current Dakota Bottom Hole Pressure

If I can be of further assistance, please contact me any time.

Respctfully submitted,

Neil Tefteller

Neil Tefteller, President

TEFTELLER, INC.
P.O. Box 1198
Farmington, NM 87499

Organize Data ScreenGraph Economics Report Plot Utility Qui

Browsing: HELMS FEDERAL (DK) | 1 | 32224A-1 Property No.: 12

Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/10/467

Item: 12/32/33 Name: GAS_RATE Type: Numeric Len: 8/197/203 Dec: 0

GAS_RATE	WTR_RATE	WHT	M_FWHP-Psi	M_FBHP-Psi	M_SIWHP-Psi	M_SIBHP-Psi	C_FWHP-	C_FBHP-
0	0.0			1977.0	2329.0			
0	446.0			861.0	1002.0			
0	354.0			609.0	706.0			
0	239.0			666.0	773.0			
0	187.0			793.0	922.0			
0	293.0			733.0	852.0			
0	281.0			849.0	988.0			
0	335.0			1001.0	1168.0			
0	299.0			965.0	1125.0			
				1406.0				

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 & I

FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD
VERSION 1.0 3/13/94

GAS GRAVITY	0.7
COND. OR MISC. (C/M)	C
%N2	0.3
%CO2	0.86
%H2S	0
DIAMETER (IN)	1.25
DEPTH (FT)	5187
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	873
BOTTOMHOLE PRESSURE (PSIA)	1004.9

HELMS FEDERAL #1 MESAVERDE - (ORIGINAL)

FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD
VERSION 1.0 3/13/94

GAS GRAVITY	0.7
COND. OR MISC. (C/M)	C
%N2	0.3
%CO2	0.86
%H2S	0
DIAMETER (IN)	1.25
DEPTH (FT)	5187
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	550
BOTTOMHOLE PRESSURE (PSIA)	628.2

HELMS FEDERAL #1 MESAVERDE - (CURRENT)

Organize Data ScreenGraph Economics Report Plot Utility Qui

Browsing: HELMS FEDERAL (MV) | 1 | 32224B-1 Property No.: 13

Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/12/467

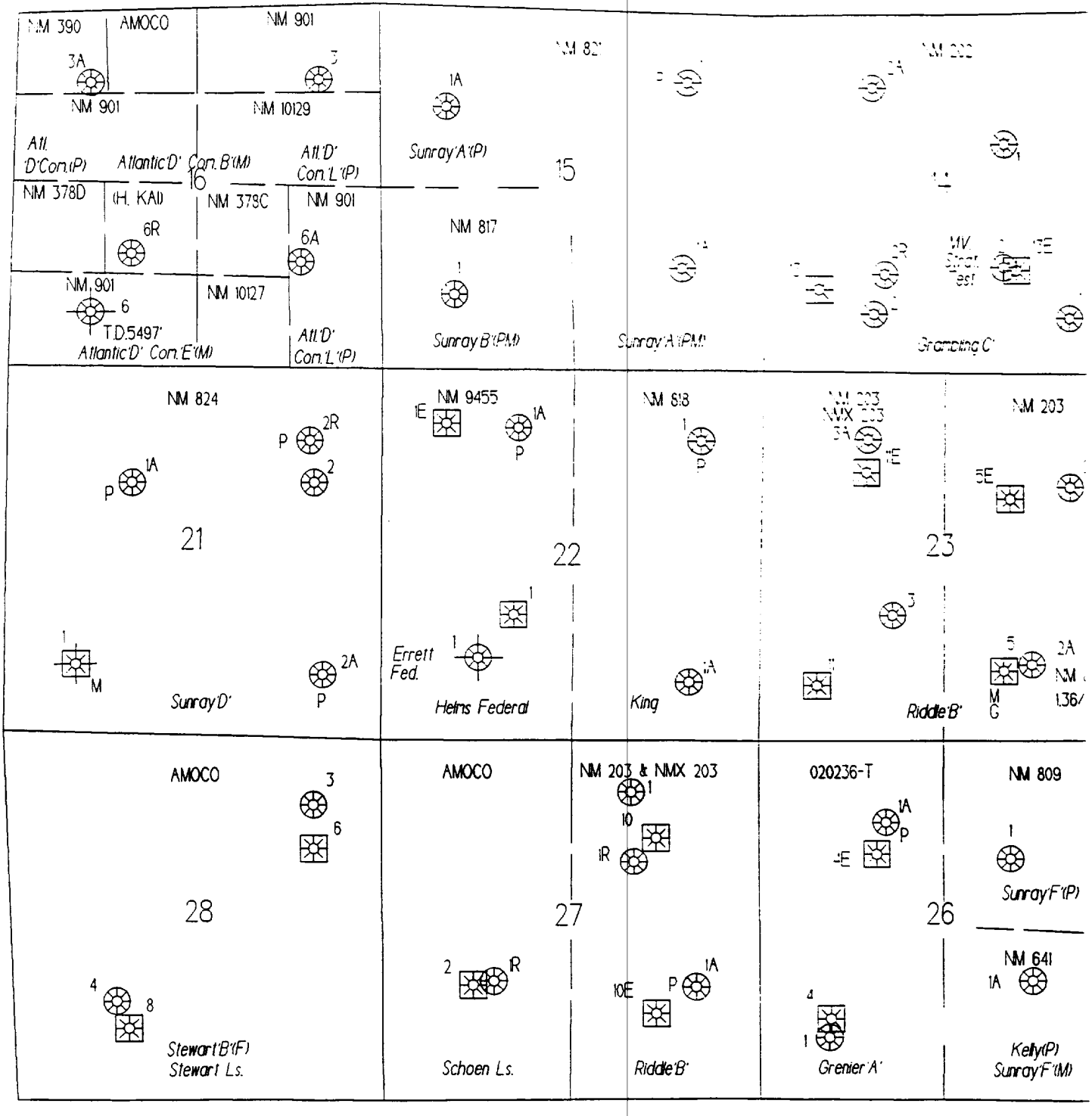
Item: 12/32/33 Name: GAS_RATE Type: Numeric Len: 8/197/203 Dec: 0

GAS_RATE	WTR_RATE	WHT	M_FWHP-Psi	M_FBHP-Psi	M_SIWHP-Psi	M_SIBHP-Psi	C_FWHP-	C_FBHP-
0			0.0		873.0	976.0		
0			446.0		566.0	629.0		
0			242.0		485.0	539.0		
0			197.0		464.0	515.0		
0			228.0		453.0	503.0		
0			215.0		413.0	458.0		
0			262.0		444.0	493.0		
0			319.0		471.0	523.0		
0			294.0		457.0	507.0		
0			298.0		560.0	623.0		
0			373.0		562.0	625.0		
					550.0			

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Tabl

F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R &

HELMS FEDERAL #1
SECTION 22 T30N R10W
BLANCO MESAVERDE/BASIN DAKOTA



FARMINGTON 1997 MONTHLY PRODUCTION FOR 32224B PHS030M
HELMS FEDERAL 1
BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE

			DAYS	====== OIL =======			========== GAS ==========				
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER PROD
1	2	F	31	02	19		01	641	31	1207	15.025	
2	2	F	28	02	8		01	816	28	1207	15.025	
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE
PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTIO
00/00/00 00:00:00:0 PRS 04/03/97

B MY JOB NUM LU #19

FARMINGTON 1997 MONTHLY PRODUCTION FOR 32224A PHS030M
HELMS FEDERAL 1
BASIN DAKOTA (PRORATED GAS) FIELD DAKOTA ZONE

			DAYS	OIL			GAS					
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER PROD
1	2	F					01	1180	31	1039	15.025	
2	2	F					01	1494	28	1039	15.025	
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE
PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTIO
00/00/00 00:00:00:0 PRS 04/03/97

B MY JOB NUM LU #19

FARMINGTON 1997 MONTHLY PRODUCTION FOR 32224A PHS030M
HELMS FEDERAL 1
BASIN DAKOTA (PRORATED GAS) FIELD DAKOTA ZONE

			DAYS	OIL			GAS					
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER PROD
1	2	F					01	1180	31	1039	15.025	
2	2	F					01	1494	28	1039	15.025	
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE
PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTIO
00/00/00 00:00:00:0 PRS 04/03/97

B MY JOB NUM LU #19