

fca

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 :

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil and Gas PO Box 4289, Farmington, NM 87499

Operator Hill	Well No. #1-A	Unit Ltr. - Sec - Twp - Rge F-4-29N-08W	Address San Juan
Lease			County
Spacing Unit Lease Types: (check 1 or more)			
OGRID NO. <u>14538</u>	Property Code <u>7111</u>	API NO. <u>30-045-21917</u>	Federal ☒ , State ☐ , Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Pictured Cliffs-72359		Mesaverde - 72319
2. Top and Bottom of Pay Section (Perforations)	3130-3169		4832-5360'
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. 228 psi (see attachment) (Original) b. 974 psi (see attachment)	(see attachment) OIL CON. DIV. DIST. 3	a. 253 psi (see attachment) b. 945 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1104		BTU 1139
7. Producing or Shut-In?	Producing		Shut-In
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: N/A Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: 1/31/99 Rates: 38 mcf/d 0.0 bopd		Date: 1/31/99 Rates: 0 mcf/d 0 bopd
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Will be supplied upon completion.		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? ☐ 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 Mary Ellen Lutey TITLE Production Engineer DATE 03-11-99

TYPE OR PRINT NAME Mary Ellen Lutey TELEPHONE NO. (505) 326-9700

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

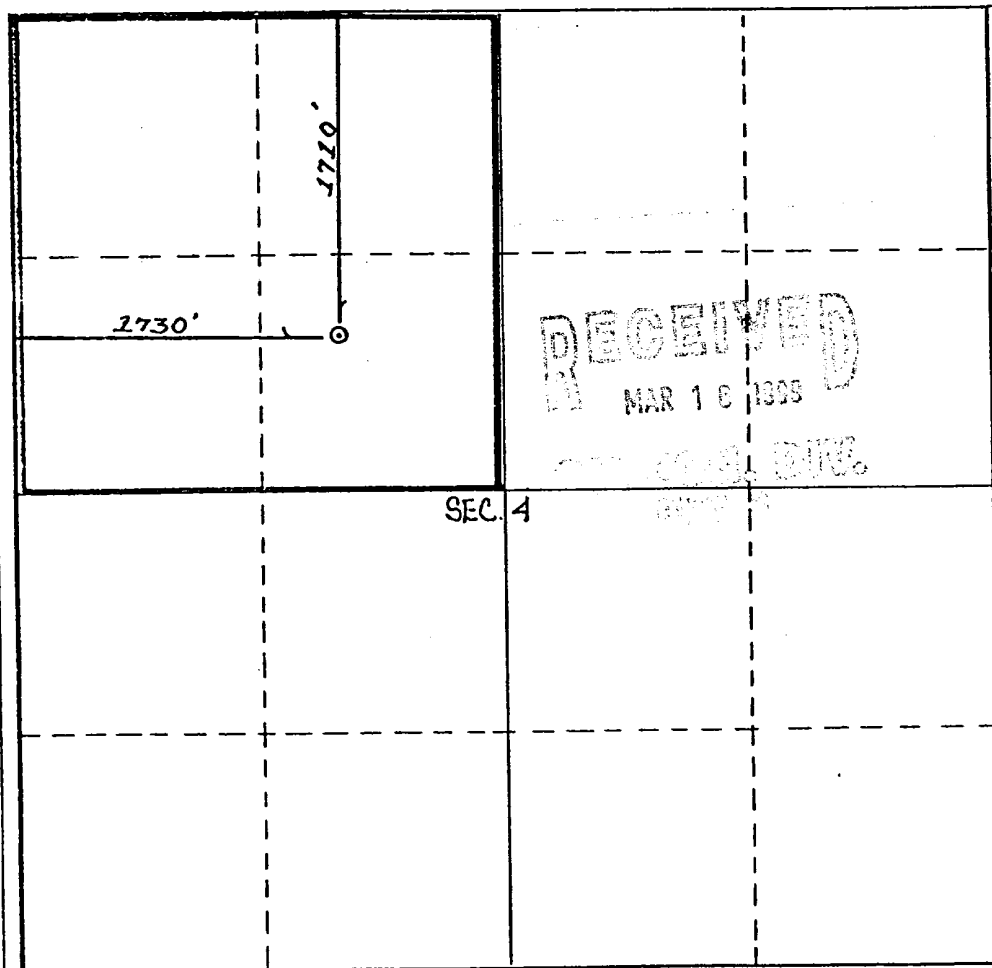
Operator SOUTHLAND ROYALTY COMPANY			Lease HILL		Well No. 1A
Unit Letter F	Section 4	Township 29N	Range 8W	County San Juan	
Actual Footage Location of Well: 1710 feet from the North line and 1730 feet from the West line					
Ground Level Elev.	Producing Formation Pictured Cliffs		Pool Blanco		Dedicated Acreage: 164.46 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.

Name C. L. P...

Position
District Engineer

Company
Southland Royalty Company

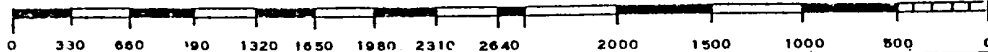
Date
September 22, 1978

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

Registered Professional Engineer
and/or Land Surveyor

Certificate No.



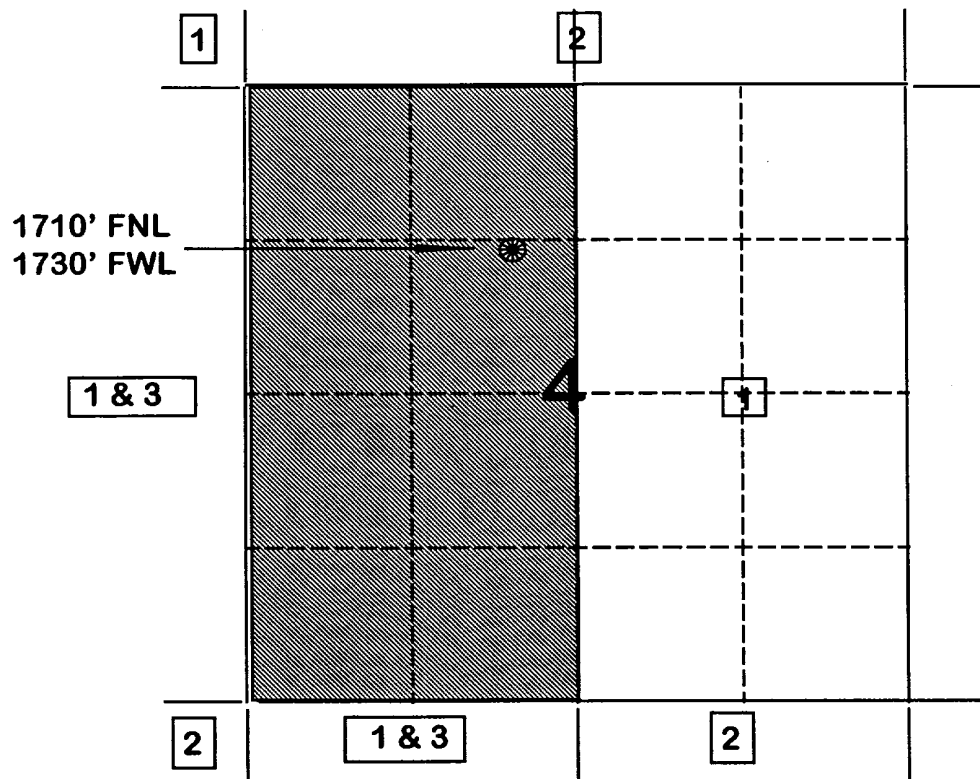
BURLINGTON RESOURCES OIL AND GAS COMPANY

Hill #1A

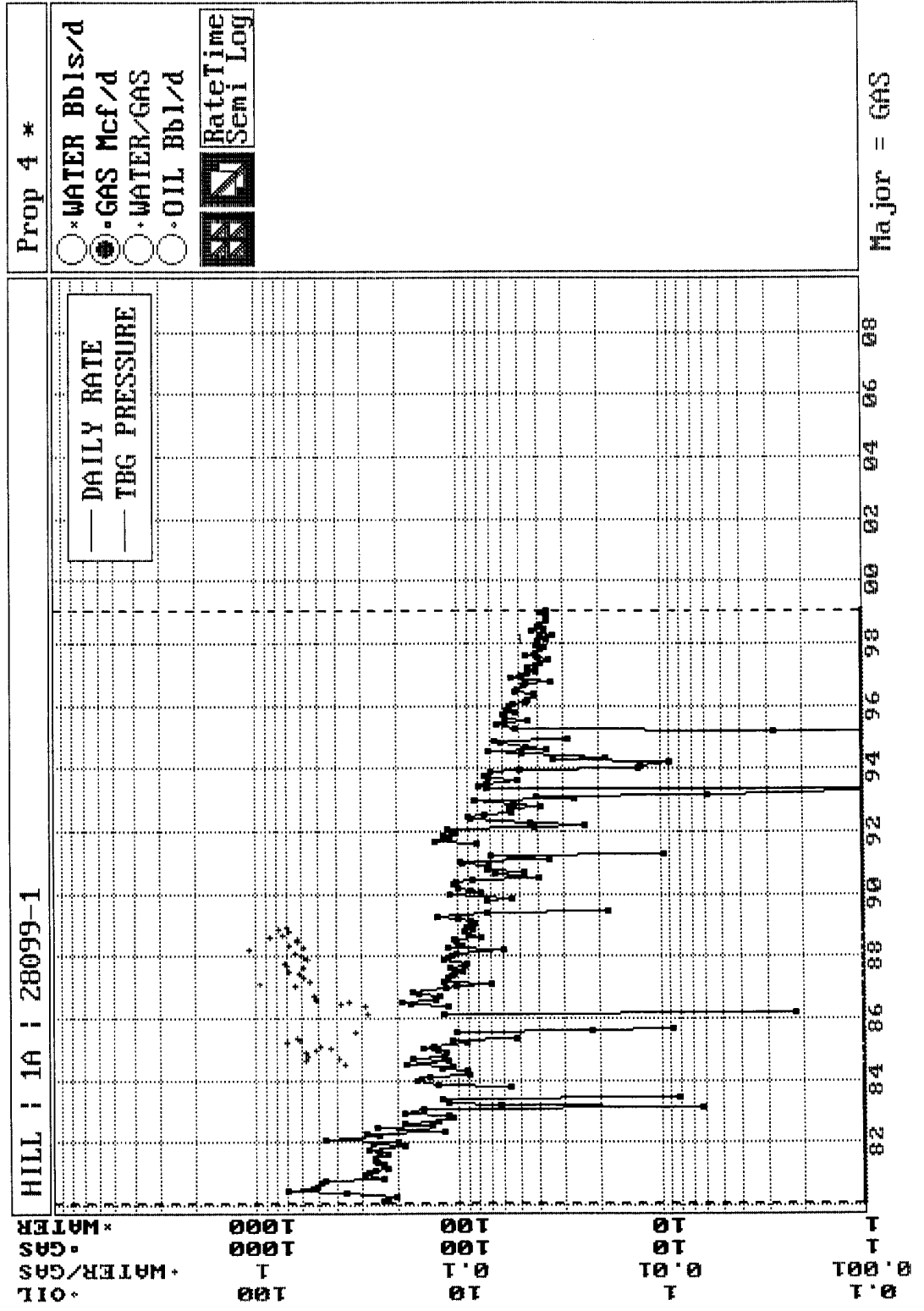
OFFSET OPERATOR \ OWNER PLAT

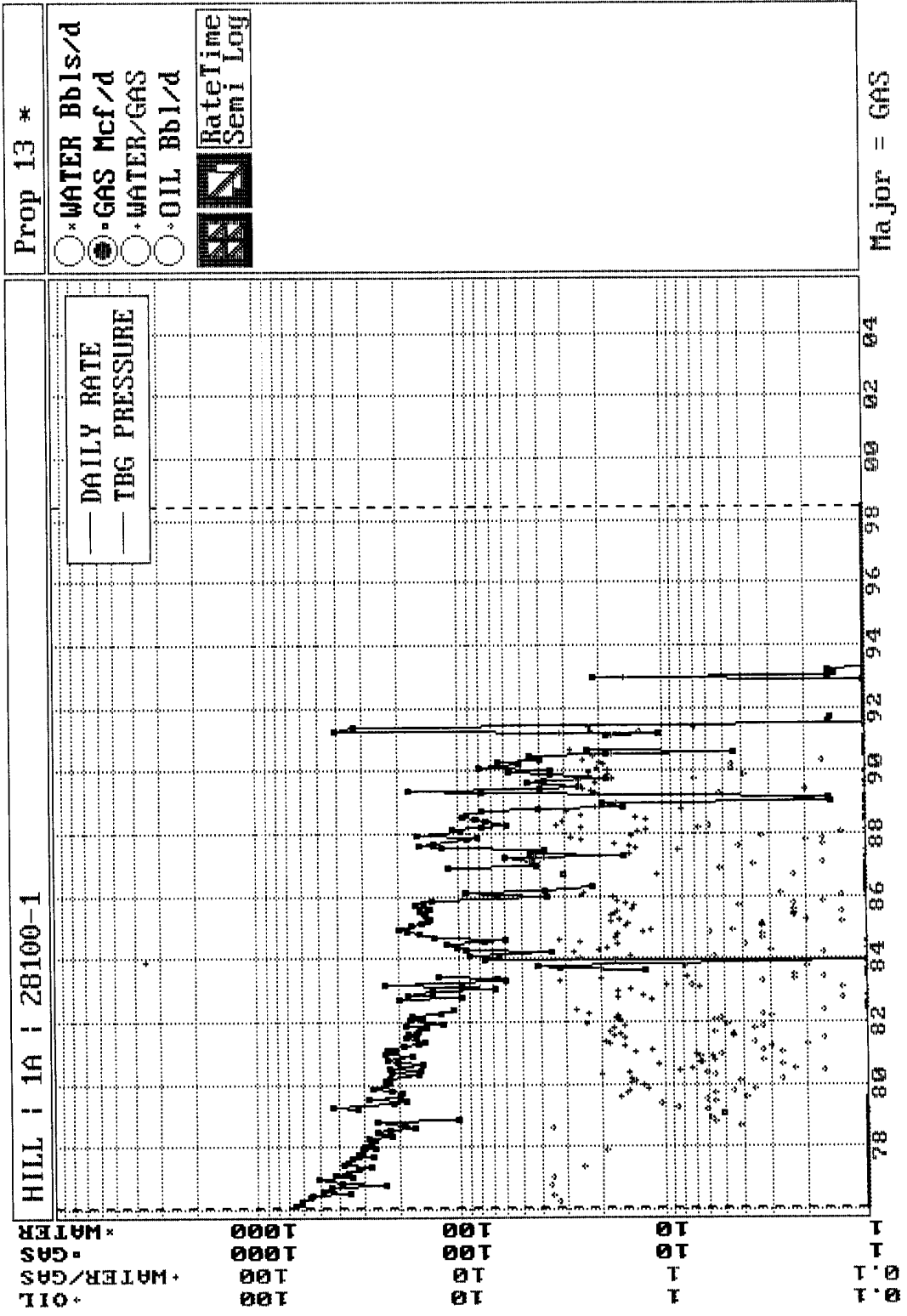
Mesaverde (W/2) / Pictured Cliffs (NW/4) Formations Commingle Well

Township 29 North, Range 8 West



- 1) Burlington Resources
- 2) Amoco Production Company
c/o Bruce Zimney
P.O. Box 800
Denver, CO 80201
- 3) Taurus Exploration USA, Inc.
2101 6th Avenue North
Birmingham, Alabama 35203





Hill #1A
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 1/14/98

Mesaverde		Pictured Cliffs	
<u>MV-Current</u>		<u>PC-Current</u>	
GAS GRAVITY	<u>0.667</u>	GAS GRAVITY	<u>0.64</u>
COND. OR MISC. (C/M)	<u>M</u>	COND. OR MISC. (C/M)	<u>M</u>
%N2	<u>0.25</u>	%N2	<u>0.17</u>
%CO2	<u>1.02</u>	%CO2	<u>1.02</u>
%H2S	<u>0</u>	%H2S	<u>0</u>
DIAMETER (IN)	<u>1.5</u>	DIAMETER (IN)	<u>7</u>
DEPTH (FT)	<u>5096</u>	DEPTH (FT)	<u>3150</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>	SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>114</u>	BOTTOMHOLE TEMPERATURE (DEG F)	<u>94</u>
FLOWRATE (MCFPD)	<u>0</u>	FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>224</u>	SURFACE PRESSURE (PSIA)	<u>212</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>252.9</u>	BOTTOMHOLE PRESSURE (PSIA)	<u>228.1</u>
<u>MV-Original</u>		<u>PC-Original</u>	
GAS GRAVITY	<u>0.667</u>	GAS GRAVITY	<u>0.64</u>
COND. OR MISC. (C/M)	<u>M</u>	COND. OR MISC. (C/M)	<u>M</u>
%N2	<u>0.25</u>	%N2	<u>0.17</u>
%CO2	<u>1.02</u>	%CO2	<u>1.02</u>
%H2S	<u>0</u>	%H2S	<u>0</u>
DIAMETER (IN)	<u>1.5</u>	DIAMETER (IN)	<u>7</u>
DEPTH (FT)	<u>5239</u>	DEPTH (FT)	<u>3150</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>	SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>115</u>	BOTTOMHOLE TEMPERATURE (DEG F)	<u>94</u>
FLOWRATE (MCFPD)	<u>0</u>	FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>822</u>	SURFACE PRESSURE (PSIA)	<u>897</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>944.6</u>	BOTTOMHOLE PRESSURE (PSIA)	<u>973.9</u>

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Print Time: Tue Feb 09 08:26:03 1999

Property ID: 4

Property Name: HILL | 1A | 28099-1

Table Name: S:\KGRAHAM\1999COMM\TEST.DBF

--DATE--	--CUM_OIL-- Bbl	---CUM_GAS--- Mcf	M SIWHP Psi
01/01/80		0	885.0 original
04/07/81		160061	607.0
05/01/82		260338	517.0
04/17/84		333518	550.0
03/01/99		687482	200 current estimated from P/z data

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Property ID: 13
Property Name: HILL | 1A | 28100-1
Table Name: S:\KGRAHAM\1999COMM\TEST.DBF

--DATE--	---CUM GAS-- Mcf	M SIWHP Psi	
11/29/75	0	810.0	original
05/16/77	216274	440.0	
05/24/78	326483	435.0	
03/24/79	373289	467.0	
06/23/80	478982	452.0	
06/02/82	603184	359.0	
08/02/84	666430	371.0	
04/01/87	755041	455.0	
06/27/89	815392	360.0	
04/15/91	846521	322.0	
05/01/91	856647	334.0	
03/01/99	857631	212	current estimated from P/Z data