

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 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS :

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

HANCOCK B

10

K 28-28N-9W

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7078 API NO. 30-045-20821 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	Fruitland Coal - 71629		Aztec Pictured Cliffs - 71280
2. Top and Bottom of Pay Section (Perforations)	Will be supplied upon completion		2431' - 2461'
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. 254 psi (see attachment) (Original) b. 492 psi (see attachment)		a. 183 psi (see attachment) b. 722 psi (see attachment)
6. Oil Gravity ($^{\circ}$ API) or Gas BTU Content	BTU 1067		BTU 1093
7. Producing or Shut-In?	Shut - in		producing
Production Marginal? (yes or no)	no		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 of recent test (within 60 days)	Date: n/a Rates:	Date: 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: %	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? ☒ 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. NMOC 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 Joan M. Easley TITLE Production Engineer DATE 6/5/97TYPE OR PRINT NAME Joan M. Easley TELEPHONE NO. (505) 326-9700

☐ AMENDED REPO

WELL LOCATION AND ACREAGE DEDICATION PLAT

' API Number	' Pool Code	' Pool Name
30-045-20821	71623/71280	Basin Fruitland Coal/Aztec Pictured Cli
' Property Code	' Property Name	' Well Number
7078	Hancock B	10
' OGRID No.	' Operator Name	' Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	6286'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
K	28	28-N	9-W		1830	South	1460	West	S.J.

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹³ Dedicated Acres EC-160 ETC-S/320	¹² Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATE
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16		Not resurveyed, prepared from a plat by David O. Vilven dated 4-29-71.
	28	
	1460'	
	1830'	

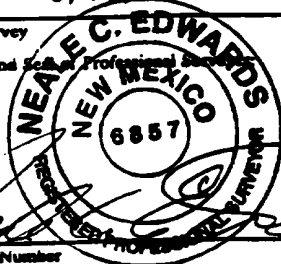
17 OPERATOR CERTIFICATION

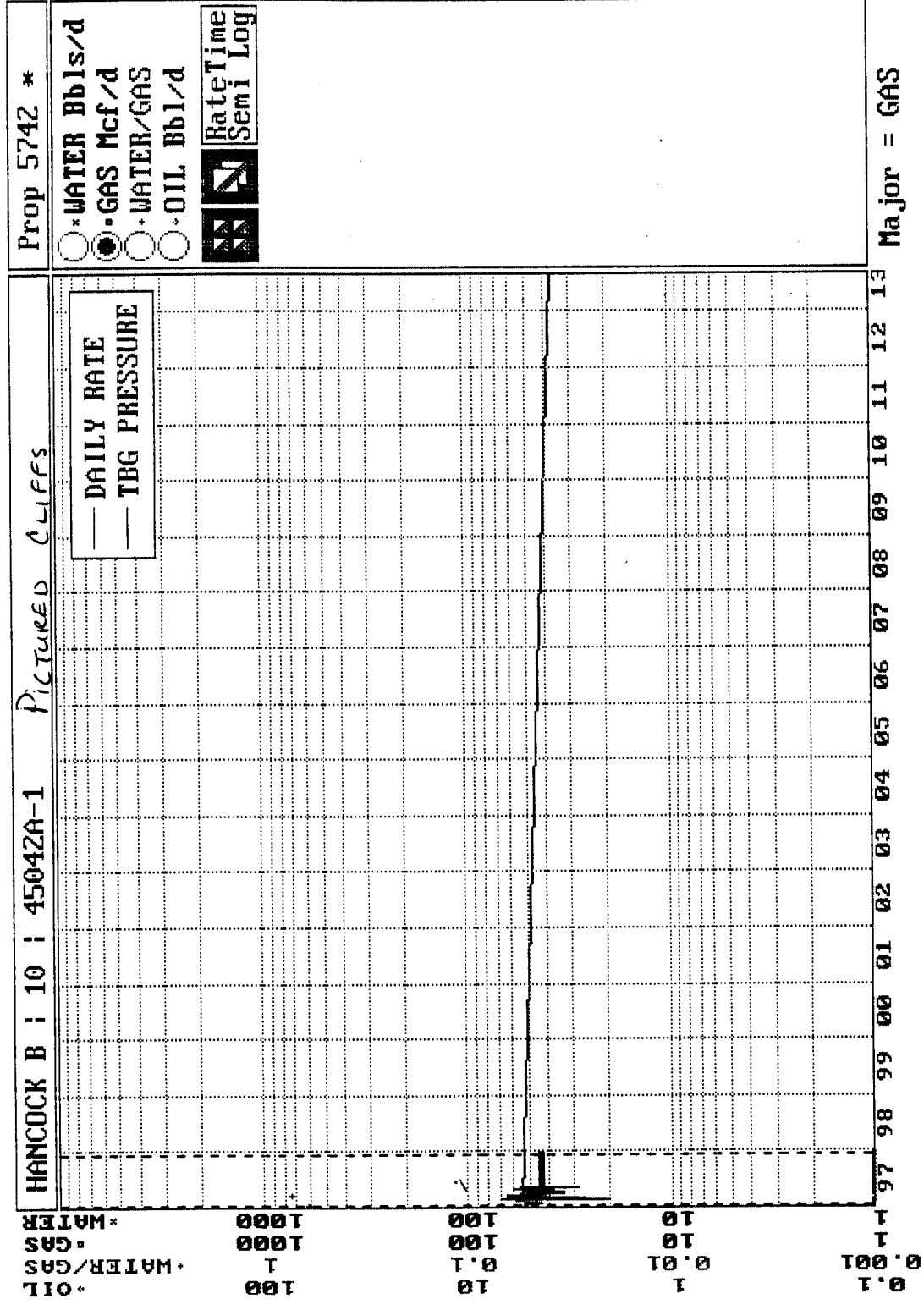
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.


 Signature
Peggy Bradfield
 Printed Name
Regulatory Administrator
 Title
6-18-97
 Date

18 SURVEYOR CERTIFICATION

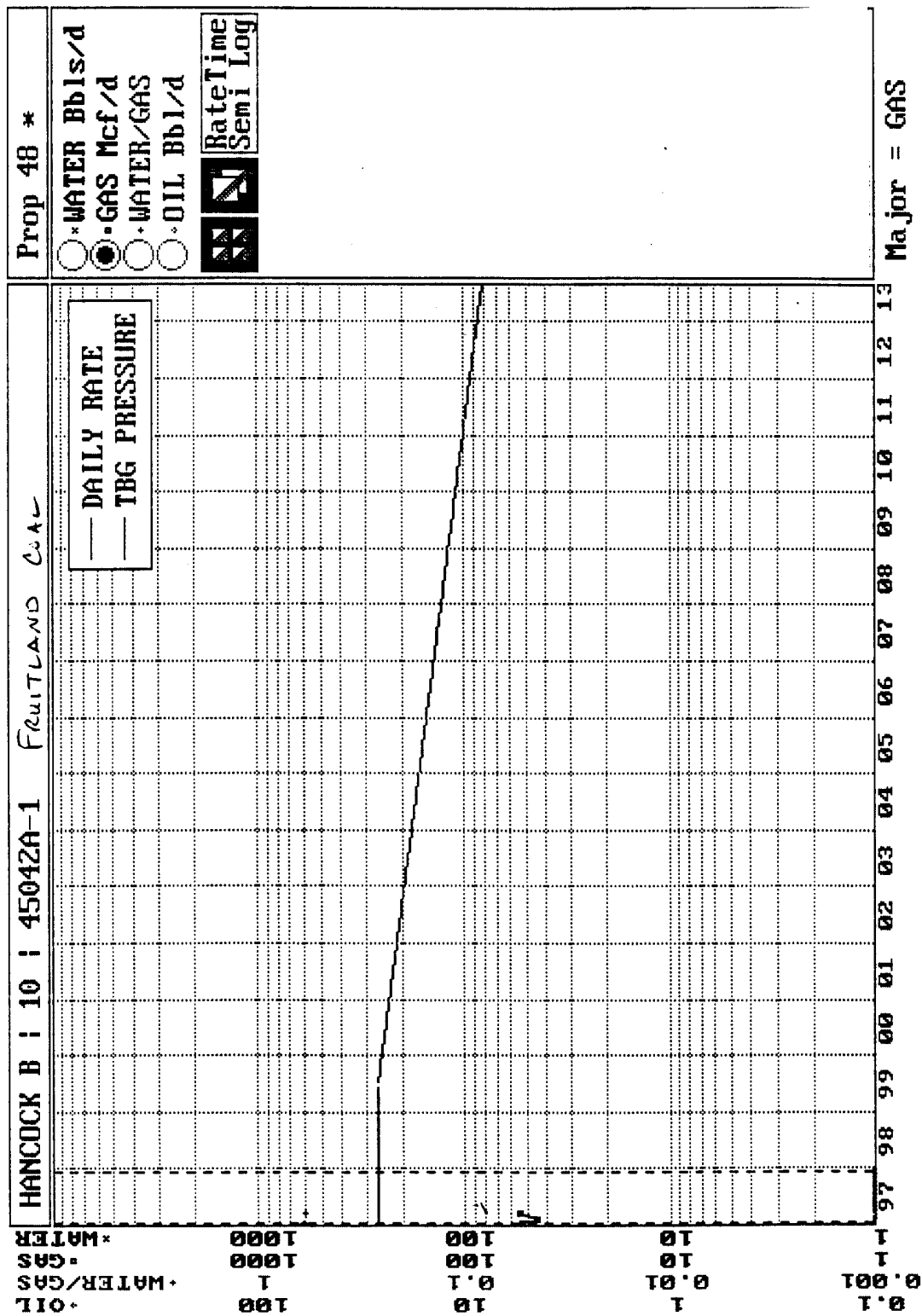
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made in or under my supervision, and that the same is true and correct to the best of my belief.

6/16/97
 Date of Survey
 Signature and Seal of Professional Surveyor

 Certificate Number



Major = GAS

Anticipated Production

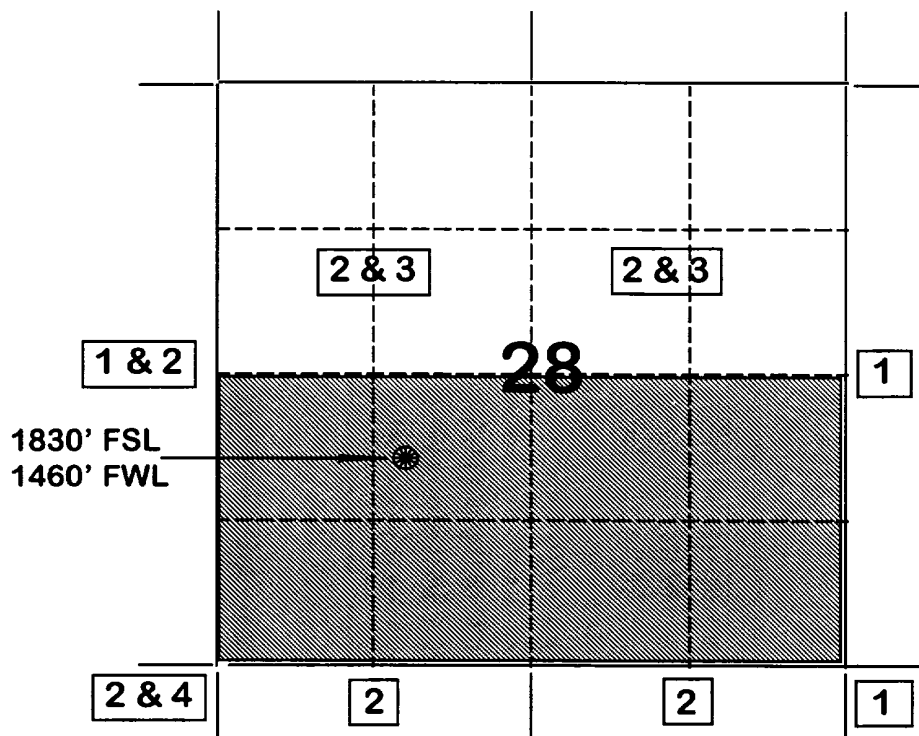


BURLINGTON RESOURCES OIL AND GAS COMPANY

**Hancock B #10
OFFSET OPERATOR \ OWNER PLAT**

Pictured Cliffs (SW/4)/Fruitland Coal (S/2) Formations Commingle Well

Township 28 North, Range 9 West



1) Burlington Resources Oil and Gas Company

2) Amoco Production Company

Attn: Bruce Zimney

P.O. Box 800

Denver, CO 80201

3) S G Interest

811 Dallas, Suite 1605

Houston, TX 77002

4) Richardson Operating Co.

1700 Lincoln Street, Suite 1700

Denver, CO 80203

Page No.: 4
Print Time: Thu May 22 10:22:03 1997
Property ID: 5742
Property Name: HANCOCK B | 10 | 45042A-1
Table Name: K:\ARIES\RR98PDP\TEST.DBF

Pictured Cliffs

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

08/11/71	0	680.0	← initial
05/18/72	51000	358.0	
09/07/72	69265	367.0	
06/06/73	111718	340.0	
04/01/75	205835	247.0	
07/11/77	307323	194.0	
07/09/79	387405	195.0	
06/23/81	457251	187.0	
06/07/83	507110	230.0	
08/01/85	566704	221.0	
09/01/88	1168437	207.0	

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.628
COND. OR MISC. (C/M)	C
%N2	0.24
%CO2	0.49
%H2S	0
DIAMETER (IN)	2.875
DEPTH (FT)	2450
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	100
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	680
BOTTOMHOLE PRESSURE (PSIA)	721.9

HANCOCK B #10 PICTURED CLIFFS - ORIGINAL PRESSURE

Page No.: 6

Print Time: Thu May 22 10:22:07 1997

Property ID: 7094

Property Name: STOREY C | 12 | 50496A-1

Table Name: K:\ARIES\RR98PDP\TEST.DBF

← nearest offset Pictured cliffs
w/ current pressure
data

(T28N - R09W - Sec. 34c)

--DATE-- ---CUM_GAS-- M SIWHP
Mcf Psi

08/17/61	0	754.0
10/06/61	0	753.0
05/18/62	65000	481.0
02/14/63	81000	528.0
02/17/64	126000	480.0
02/19/65	201000	391.0
03/02/66	271000	370.0
03/13/67	333000	347.0
03/07/68	382000	331.0
06/30/69	445134	295.0
10/15/70	509289	252.0
07/30/71	544414	240.0
08/09/72	589793	228.0
09/13/73	632995	217.0
04/17/74	653366	212.0
04/14/76	722323	202.0
05/24/78	791802	163.0
06/09/80	856491	164.0
06/09/82	907461	180.0
08/01/84	945415	191.0
09/25/85	974059	148.0
09/01/88	1014373	185.0
05/08/90	1045889	205.0
07/28/92	1074528	219.0
06/17/94	1109178	174.0

← current

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	<u>0.62</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.17</u>
%CO2	<u>0.31</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>2.875</u>
DEPTH (FT)	<u>2375</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>100</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>174</u>
BOTTOMHOLE PRESSURE (PSIA)	183.4

STOREY C #12 PICTURED CLIFFS - CURRENT PRESSURE

Page No.: 3

Print Time: Mon Jun 02 14:10:49 1997

FRUITLAND COAL

Property ID: 9246

Property Name: SHARP | 800 | 3719A-1 ← Nearest offset w original pressure

Table Name: K:\ARIES\RR98PDP\TEST.DBF

--DATE-- ---CUM_GAS-- M SIBHP
Mcf Psi

(T28N-R08W-Sec.18)

05/17/89

469.0

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.611
COND. OR MISC. (C/M)	C
%N2	0.14
%CO2	0.52
%H2S	0
DIAMETER (IN)	2.875
DEPTH (FT)	2060
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	90
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	469
BOTTOMHOLE PRESSURE (PSIA)	491.9

SHARP #800 FRUITLAND COAL - ORIGINAL PRESSURE

Pressure Buildup on Fruitland Coal Zone of Sharp #5
Conducted January 1996

Hours	Bottomhole Pressure, psia	Temperature, deg F
90	254	91
119	254	91
120	194	93
122	189	93
124	179	93
128	170	93
130	164	93
132	159	93
134	165	93
135	164	93
136	168	93
138	164	93
140	159	93
142	164	92
144	162	93
146	156	92
147	157	92
148	159	92
150	160	92
154	157	92
156	229	91
157	229	91
158	234	92
160	237	92
162	238	92
164	240	92
166	241	92
168	242	92
170	243	92
174	244	91
178	245	91
182	246	91
183	246	91
188	247	91
196	248	91
206	249	91
220	250	91
240	251	91
268	252	91
310	253	91
370	254	91
431	254	91

↑
 nearest offset of
 current pressure
 data
 (28N-8W - see 18N)

← current Fruitland Coal
 Bottomhole Pressure

FARMINGTON
HANCOCK B 10
AZTEC PICTURED CLIFFS (GAS) FIELD

1997 MONTHLY PRODUCTION FOR 45042A

PHS030M

ICTURED CLIFFS ZONE

MO	T	S	DAYS	ON	PC	OIL	PROD	GRV	PC	PROD	GAS	ON	BTU	PRESS	WATER	PROD
1	2	F	31						01	1628	31	1092	15.025			1
2	2	F	28						01	1378	28	1092	15.025			
3	2	F	31						01	1660	31	1092	15.025			1
4																
5																
6																
7																
8																
9																
10																
11																
12																

PF6 - RETURNS TO ANNUAL DISPLAY
PF10 - HELP INFORMATION

PF3 - TRANSFER TO UPDATE
PF9 - DISPLAY MONTHLY INJECTIC
PRS 05/03/97

00/00/00 00:00:00:0

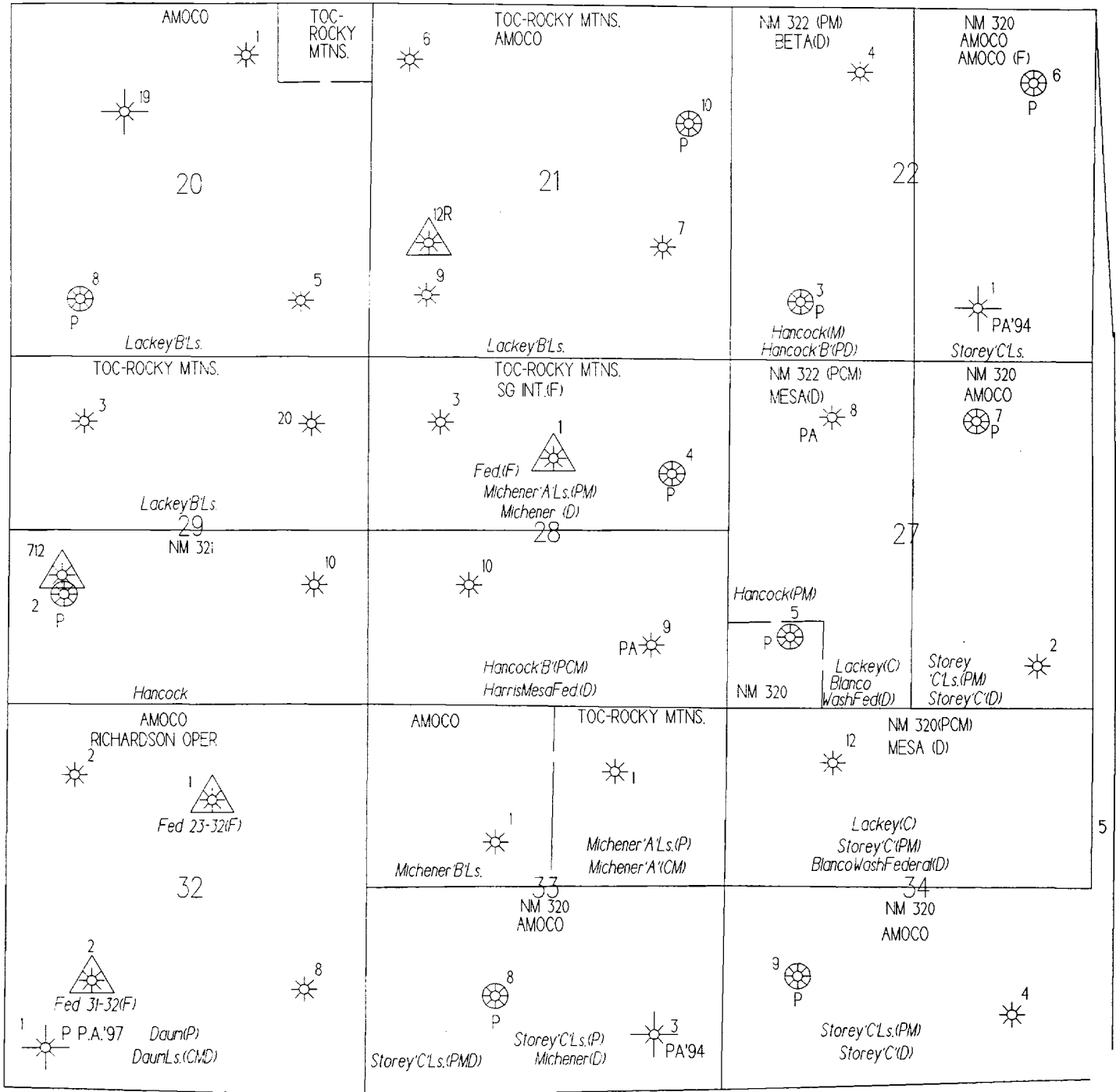
B MY JOB

NUM LU #5

HANCOCK B #10

Section 28, T28N, R9W

Fruitland Coal / Pictured Cliffs



7
2
1

5