

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 :

☒ Administrative
☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

HANCOCK

5A

F 27-28N-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 7076 API NO. 30-45-2637400 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	Chacra - 82329		Mesaverde - 72319
2. Top and Bottom of Pay Section (Perforations)	4011' - 4228'		5540'-5782', 5327'-5506'
3. Type of production (Oil or Gas)	gas		Gas
4. Method of Production (Flowing or Artificial Lift)	flowing		Flowing
5. Bottomhole Pressure	(Current) Est. a. 305	a. FEB 17 1999	a. 559
Oil Zones - Artificial Lift: Estimated Current	(Original) Est. b. 1059	b. OIL CON. DIV. DIST. 3	b. 856
Gas & Oil - Flowing: Measured Current			
All Gas Zones: Estimated or Measured Original			
6. Oil Gravity (°API) or Gas BTU Content	BTU 1178		BTU 1313
7. Producing or Shut-In?	Not yet completed		Producing
Production Marginal? (yes or no)	yes		Yes
* If Shut-In and oil/gas/water rates of last production	Date: n/a Rates:	Date: Rates:	Date: n/a Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: n/a Rates: n/a	Date: Rates:	Date: n/a Rates: 102 MCF/D
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 ☐ No11. 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 ☐ No13. 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 Mike Pippin TITLE Production Engineer DATE 02-12-99TYPE OR PRINT NAME Mike Pippin 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.

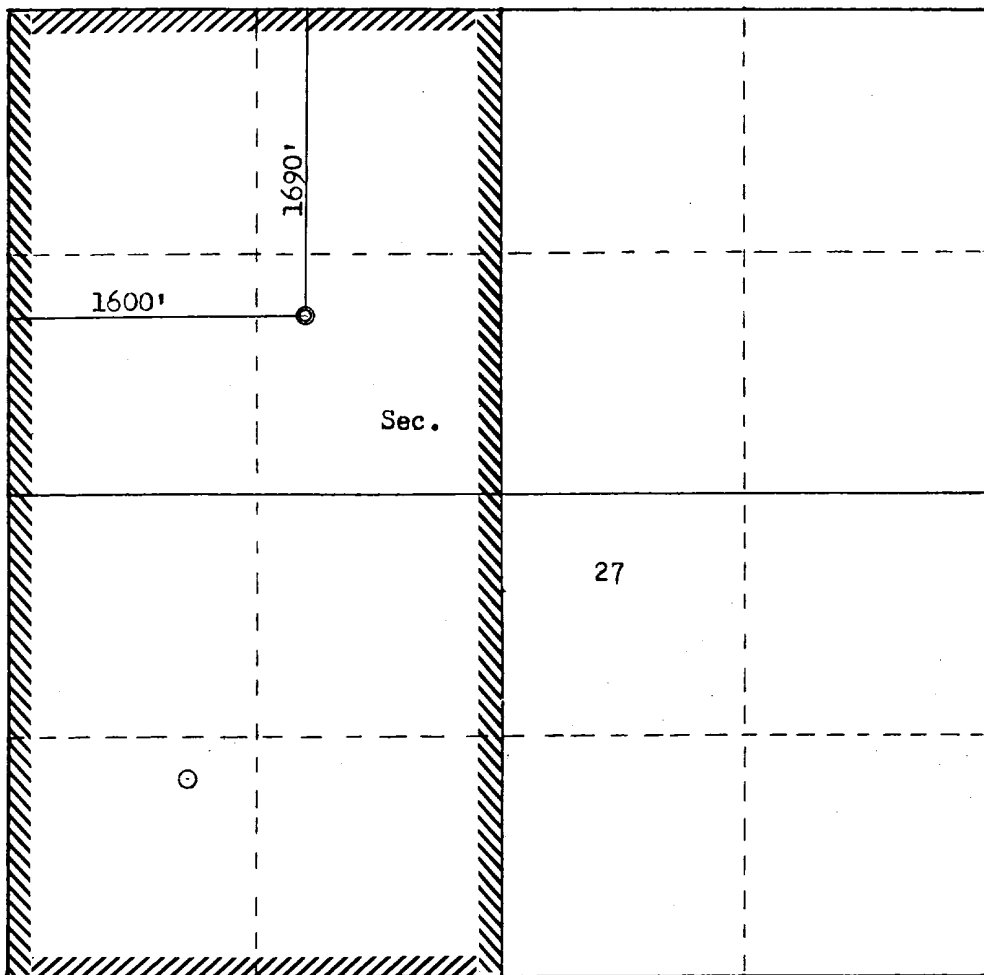
Operator EL PASO NATURAL GAS COMPANY			Lease HANCOCK (SF 077107A)		Well No. 5A
Unit Letter F	Section 27	Township 28N	Range 9W	County San Juan	
Actual Footage Location of Well: 1690 feet from the North line and 1600 feet from the West line					
Ground Level Elev: 6828	Producing Formation Mesa Verde	Pool Blanco	Dedicated Acreage: 320 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
Drilling Clerk

Position
El Paso Natural Gas

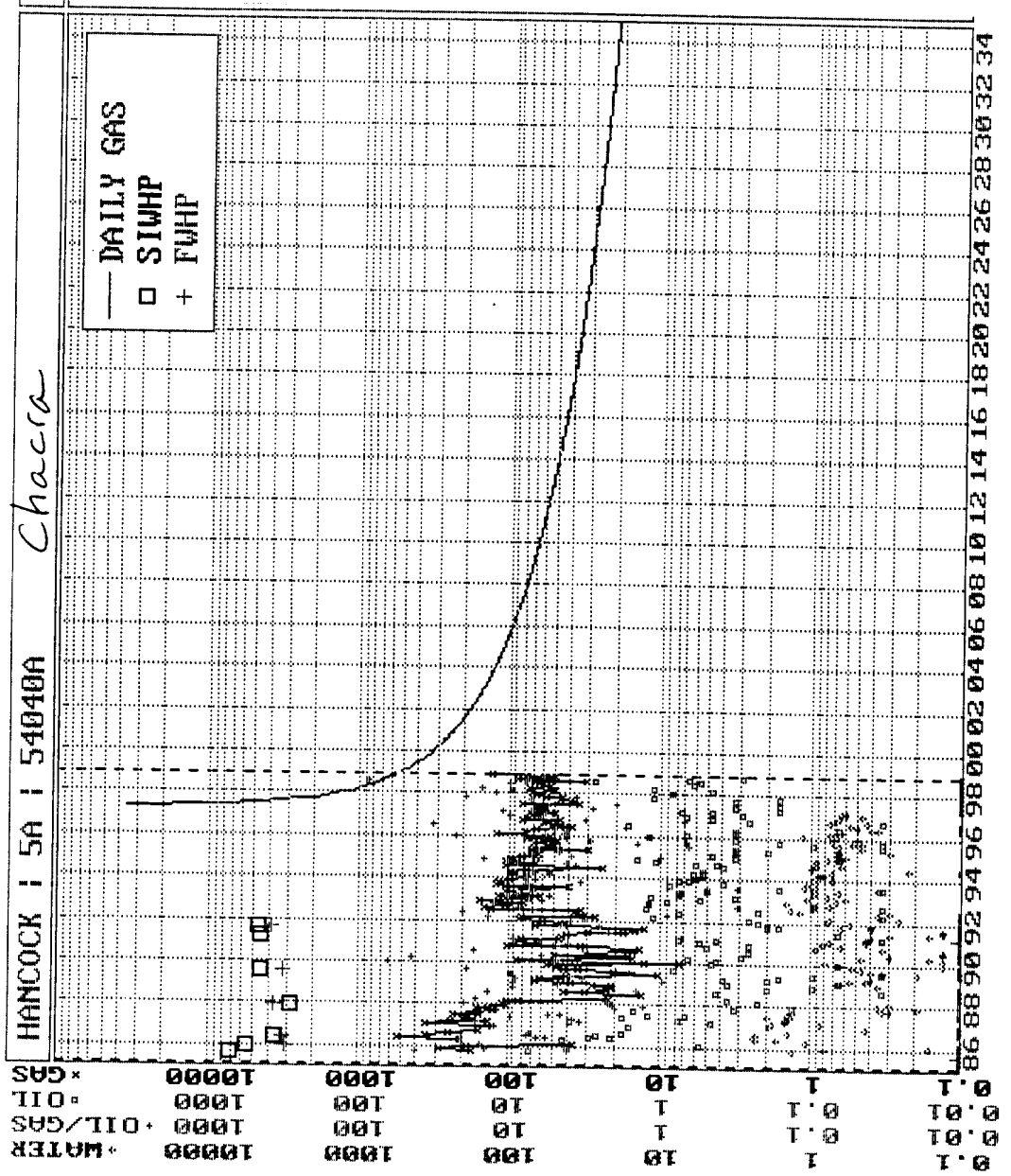
Company

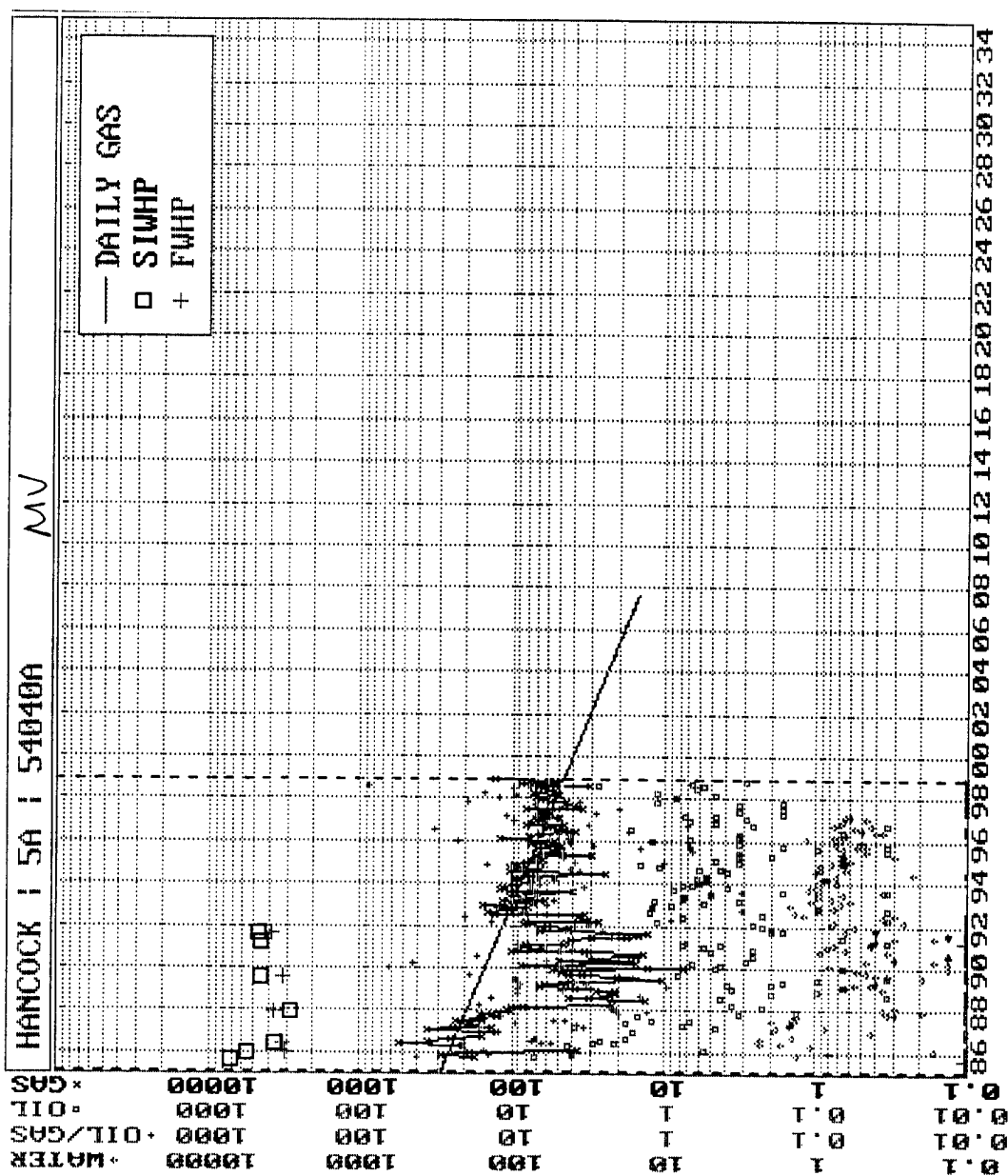
Date

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
April 15, 1985

Registered Professional Engineer
and Land Surveyor
Fred B. Kerr Jr.
Fred B. Kerr Jr.
Certificate No. **15**





Page No.: 1
Print Time: Mon Feb 01 14:34:37 1999
Property ID: 7749
Property Name: LACKEY | 9 | 45096A-1
Table Name: K:\ARIES\RR99PDP\TEST.DBF

OFFSET-
CHACKRA

--DATE-- PHA M FWHP- M FBHP- M SIWHP M SIBHP
■■■■■■■■■■ ■■■■ ■■■Psi■■■ ■■■Psi■■■ ■■■Psi■■■ ■■■Psi■■■

12/17/74		962.0	
01/03/75	0.0	975.0	1064.0
04/11/75	127.0	665.0	723.0
04/14/76	188.0	372.0	403.0
06/28/77	112.0	342.0	370.0
04/12/93		280.0	

Page No.: 1

Print Time: Mon Feb 01 14:10:47 1999

Property ID: 54

Property Name: HANCOCK | 5A | 54040A

Table Name: Q:\ARIES\FD99AR12\TEST.DBF

mv

--DATE-- PHA M FWHP- M FBHP- M SIWHP M SIBHP
■■■■■■■■■■ ■■■■ ■■■Psi■■■■ ■■■Psi■■■■ ■■■Psi■■■■ ■■■Psi■■■■

08/23/85			719.0	
12/09/85	313.0		556.0	0.0
06/17/86	322.0		373.0	0.0
12/16/87	370.0		291.0	0.0
07/19/89	318.0		452.0	0.0
02/21/91			462.0	
08/06/91	380.0		474.0	0.0

HANCOCK #5A
Bottom Hole Pressures
Flowing and Static BHP
Cullender And Smith Method
2/1/99

Mesaverde		CHACRA	
<u>MV-Current</u>		<u>CH-Current</u>	
GAS GRAVITY	0.76	GAS GRAVITY	0.667
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.44	%N2	0.29
%CO2	0.58	%CO2	0.27
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	2
DEPTH (FT)	5813	DEPTH (FT)	3497
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	134	BOTTOMHOLE TEMPERATURE (DEG F)	108
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	474	SURFACE PRESSURE (PSIA)	280
BOTTOMHOLE PRESSURE (PSIA)	558.9	BOTTOMHOLE PRESSURE (PSIA)	304.7
<u>MV-Original</u>		<u>CH-Original</u>	
GAS GRAVITY	0.76	GAS GRAVITY	0.667
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.44	%N2	0.29
%CO2	0.58	%CO2	0.27
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	2
DEPTH (FT)	5813	DEPTH (FT)	3497
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	134	BOTTOMHOLE TEMPERATURE (DEG F)	108
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	719	SURFACE PRESSURE (PSIA)	962
BOTTOMHOLE PRESSURE (PSIA)	855.6	BOTTOMHOLE PRESSURE (PSIA)	1058.8

FDG055M4 4726

WELL PRODUCTION 8/8'S VOLUME

02/01/99 17:19:26

END OF DATA

DP NO: 54040A

DATE: 990106 (YYMMDD FORMAT)

HANCOCK

5A SCROLL FORWARD BY DATE: _

S

E	DATE	HOURS	-OIL PRODN-	-GAS PRODN-	-WATER PRODN-
L	PRODUCED	ON	(BOPD BOPM)	(MCFD MCFM)	(BWPD BWPM)
-	01/06/99	0.0	0.00 0.00	102 612	0.00 0.00
-	01/07/99	0.0	0.00 0.00	102 714	0.00 0.00
-	01/08/99	0.0	0.00 0.00	102 816	0.00 0.00
-	01/09/99	0.0	0.00 0.00	102 918	0.00 0.00
-	01/10/99	0.0	0.00 0.00	102 1020	0.00 0.00
-	01/11/99	0.0	0.00 0.00	102 1122	0.00 0.00
-	01/12/99	0.0	0.00 0.00	102 1224	0.00 0.00
-	01/13/99	0.0	0.00 0.00	102 1326	0.00 0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF12=MAIN MENU

PF6=NRI PF10=BROWSE MENU
ENTER=BACKWARDSPF11=INQ/UPDATE MENU
PF24=HELP

DP NO: 54040A

DATE: 981112 (YYMMDD FORMAT)

HANCOCK

5A SCROLL FORWARD BY DATE: _

S

E	DATE	HOURS	-OIL PRODN-	-GAS PRODN-	-WATER PRODN-			
L	PRODUCED	ON	(BOPD	BOPM)	(MCFD	MCFM)	(BWPD	BWPM)
—	11/12/98	0.0	0.00	0.00	109	1784	0.00	0.00
—	11/13/98	0.0	0.00	0.00	129	1913	0.00	0.00
—	11/14/98	0.0	0.00	0.00	150	2063	0.00	0.00
—	11/15/98	0.0	0.00	0.00	127	2190	0.00	0.00
—	11/16/98	0.0	0.00	0.00	54	2244	0.00	0.00
—	11/17/98	0.0	0.00	0.00	102	2346	0.00	0.00
—	11/18/98	0.0	0.00	0.00	30	2376	0.00	0.00
—	11/19/98	0.0	0.00	0.00	130	2506	0.00	0.00
—	11/20/98	0.0	0.00	0.00	132	2638	0.00	0.00
—	11/21/98	0.0	0.00	0.00	141	2779	0.00	0.00
—	11/22/98	0.0	0.00	0.00	125	2904	0.00	0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF6=NRI PF10=BROWSE MENU PF11=INQ/UPDATE MENU
 PF12=MAIN MENU ENTER=BACKWARDS PF24=HELP

DATE: February 01,1999
NAME: HANCOCK 5A
FORM: MESAVERDE
LOCATION
UNIT: F
SEC: 27
TMN: 28N
RNG: 9W

11/86 * Lackey B L S 12E 52/266 (98) 0/5 6/57 * Lackey B L S 10 4/325 (98) [21] 0/24 3/86 * Lackey B L S 12A 79/250 (98) 0/2	5/59 * Hancock 3 10/620 (98) 0/13 10/85 * Hancock 3A 217/591 (98) 3/16 [22] 6/57 * Storey C L S 6 121/459 (98) 0/28	6/59 * Hancock 4 72/2356 (98) 0/14 10/85 * Hancock 4A 120/716 (98) 0/5 [23] 5/96 * Lackey 1M 166/109 (98) 0/0 INA 6/57 * Warren A L S 2 0/27/02 (97) 0/14
12/52 * Hancock B1 83/1124 (98) 0/0 [28] 10/85 * Hancock B 1A 66/327 (98) 0/3 7/57 * Michener A L S 4 28/1504 (98) 0/9 10/85 * Storey C L S 7 40/1542 (98) 0/11 Hancock 5A 62/377 (98) 0/2 [27] 3/86 * Storey C L S 7A 31/366 (98) 0/2 6/59 * Hancock 5 39/1284 (98) 0/0	11/85 * Storey C 11A 27/335 (98) 0/2 6/58 * Storey C 11 101/1887 (98) 0/17 [34] 4/57 * Storey C L S 9 19/1766 (98) 0/11 3/86 * Storey C L S 9A 38/277 (98) 0/1 7/57 * Storey C L S 7 40/1542 (98) 0/11 Hancock 5A 62/377 (98) 0/2 [27] 3/86 * Storey C L S 7A 31/366 (98) 0/2 6/59 * Hancock 5 39/1284 (98) 0/0	3/50 * Lackey 1 89/1179 (98) 0/2 10/85 * Hancock A 2A 105/660 (98) 0/4 11/85 * Lackey 1A 102/772 (98) 0/3 [26] 0/1 7/55 * Hancock A2 163/1496 (98) 0/1 10/85 * Storey C L S 10R 0/0 (98) 0/0 8/95 * Storey C 2M 21/40 (98) 0/0 [35] INA 3/57 * Storey C L S 10 0/2116 (98) 0/12 INA 8/95 * Storey C L S 10R 0/0 (98) 0/0 P&A 6/52 * Hancock A1 0/64 (76) 0/0
2/86 * Michener A 7 15/219 (98) 0/1 4/57 * Storey C L S 8 35/2570 (98) 0/14 [33]	11/85 * Storey C 11A 27/335 (98) 0/2 6/58 * Storey C 11 101/1887 (98) 0/17 [34] 4/57 * Storey C L S 9 19/1766 (98) 0/11 3/86 * Storey C L S 9A 38/277 (98) 0/1 7/57 * Storey C L S 7 40/1542 (98) 0/11 Hancock 5A 62/377 (98) 0/2 [27] 3/86 * Storey C L S 7A 31/366 (98) 0/2 6/59 * Hancock 5 39/1284 (98) 0/0	3/50 * Lackey 1 89/1179 (98) 0/2 10/85 * Hancock A 2A 105/660 (98) 0/4 11/85 * Lackey 1A 102/772 (98) 0/3 [26] 0/1 7/55 * Hancock A2 163/1496 (98) 0/1 10/85 * Storey C L S 10R 0/0 (98) 0/0 8/95 * Storey C 2M 21/40 (98) 0/0 [35] INA 3/57 * Storey C L S 10 0/2116 (98) 0/12 INA 8/95 * Storey C L S 10R 0/0 (98) 0/0 P&A 6/52 * Hancock A1 0/64 (76) 0/0

R-9-W

T
28
N

LEGEND
COMPLETION DATE
WELL NAME
MCF/D-CUM(MMF)
BOP/D-CUM(MBO)

REQUESTED RECORD NOT FOUND (NEXT RECORD DISPLAYED)

OPR008M1 3706

0008 CHROMATOGRAPH TEST MAIN SCREEN

15:47:22.7 02/01/99

FUNCTION (A,C,D,I) I ** DATA AT TEST PRESSURE UNLESS NOTED **
MP NUMBER 89160 LACKEY 9
EFFECTIVE DATE 19960701
REGION CD 42 SAN JUAN
MP TYPE CODE 10 GAS METER - WELLHEAD SALES

SAMPLE TYPE CODE (GAS, LIQ, BTU) GAS ----- BTU/CF -----
SAMPLE DATE 19951107 --- (AT 14.73 PSIG) --
SAMPLE LINE PRESSURE (PSIG) _____ WET 1157.519 DRY 1178.000
SAMPLE LINE TEMPERATURE (DEG F) _____
TEST DATE ----- BTU/CF -----
TEST PRESSURE (PSIG) _14.730 WET _1157.519 DRY _1178.000
TEST TEMPERATURE (DEG F) 60 VAPOR FACTOR _____
TEST LIFE (MONTHS) _12
TESTER SOURCE BA NUMBER 098795 EL PASO FIELD SERVICES
TEST PURPOSE CODE _____

03=DETAIL SCR 04=MP-NM BRWS 06=MP/DS LST 07=MP/WN LST
11=PREV SCR 12=MAIN MENU 20=NEXT REC
21=REFRESH SCR 22=PREV MENU 24=HELP PA1=TERMINATE _____

REQUESTED RECORD NOT FOUND (NEXT RECORD DISPLAYED)

mv

OPR008M1 3706

0008 CHROMATOGRAPH TEST MAIN SCREEN

15:46:21.4 02/01/99

FUNCTION (A,C,D,I) I ** DATA AT TEST PRESSURE UNLESS NOTED **
MP NUMBER 95419 HANCOCK 5A
EFFECTIVE DATE 19970301
REGION CD 42 SAN JUAN
MP TYPE CODE 10 GAS METER - WELLHEAD SALES

SAMPLE TYPE CODE (GAS,LIQ,BTU) GAS ----- BTU/CF -----
SAMPLE DATE 19970213 --- (AT 14.73 PSIG) --
SAMPLE LINE PRESSURE (PSIG) _____ WET 1290.172 DRY 1313.000
SAMPLE LINE TEMPERATURE (DEG F) _____
TEST DATE ----- BTU/CF -----
TEST PRESSURE (PSIG) _14.730 WET _1290.172 DRY _1313.000
TEST TEMPERATURE (DEG F) 60 VAPOR FACTOR _____
TEST LIFE (MONTHS) _6
TESTER SOURCE BA NUMBER 098795 EL PASO FIELD SERVICES
TEST PURPOSE CODE _____

03=DETAIL SCR 04=MP-NM BRWS 06=MP/DS LST 07=MP/WN LST
11=PREV SCR 12=MAIN MENU 20=NEXT REC
21=REFRESH SCR 22=PREV MENU 24=HELP PA1=TERMINATE _____

mv

	MOL %	GPM (AT 14.73)
HYDROGEN	_____	
HELIUM	_____	
NITROGEN	__0.44	
OXYGEN	_____	
HYDROGEN SULFIDE	_____	
CARBON DIOXIDE	__0.58	
METHANE	__74.83	
ETHANE	__13.10	3.5043
PROPANE	__7.10	1.9568
ISO-BUTANE	__0.97	0.3173
N-BUTANE	__1.89	0.5959
ISO-PENTANE	__0.48	0.1756
N-PENTANE	__0.38	0.1376
HEXANE	_____	
HEXANE PLUS	__0.23	0.1003
HEPTANE PLUS	_____	
TOTALS	100.00	6.7878

** DATA AT 14.730 PSIG UNLESS NOTED **

MP NUMBER 95419
EFFECTIVE DATE 19970301

-- GASOLINE CONTENT (GPM) --
26/70 GASOLINE _____
100% PROPANE _____
EXCESS BUTANES _____
TOTAL _____

----- SPECIFIC GRAVITY -----
CALCULATED __0.7600
MEASURED _____

SULPHUR GRAINS / 100 CU FT _____

03=MAIN SCREEN

24=HELP

PA1=TERMINATE

~~12~~ OFFSET CHACKA

OPR008M2 3706

0008 CHROMATOGRAPH GAS SAMPLE DETAIL

15:47:46.1 02/01/99

GPM

** DATA AT 14.730 PSIG UNLESS NOTED **

MOL % (AT 14.73)

HYDROGEN	_____	
HELIUM	_____	
NITROGEN	___0.29	
OXYGEN	_____	
HYDROGEN SULFIDE	_____	
CARBON DIOXIDE	___0.27	
METHANE	___86.86	
ETHANE	___7.03	1.8805
PROPANE	___3.12	0.8599
ISO-BUTANE	___0.50	0.1636
N-BUTANE	___0.83	0.2617
ISO-PENTANE	___0.28	0.1025
N-PENTANE	___0.21	0.0761
HEXANE	_____	
HEXANE PLUS	___0.61	0.2661
HEPTANE PLUS	_____	
TOTALS	100.00	3.6104

MP NUMBER 89160

EFFECTIVE DATE 19960701

-- GASOLINE CONTENT (GPM) --

26/70 GASOLINE _____

100% PROPANE _____

EXCESS BUTANES _____

TOTAL

----- SPECIFIC GRAVITY -----

CALCULATED _0.6670

MEASURED _____

SULPHUR GRAINS / 100 CU FT _____

03=MAIN SCREEN

24=HELP

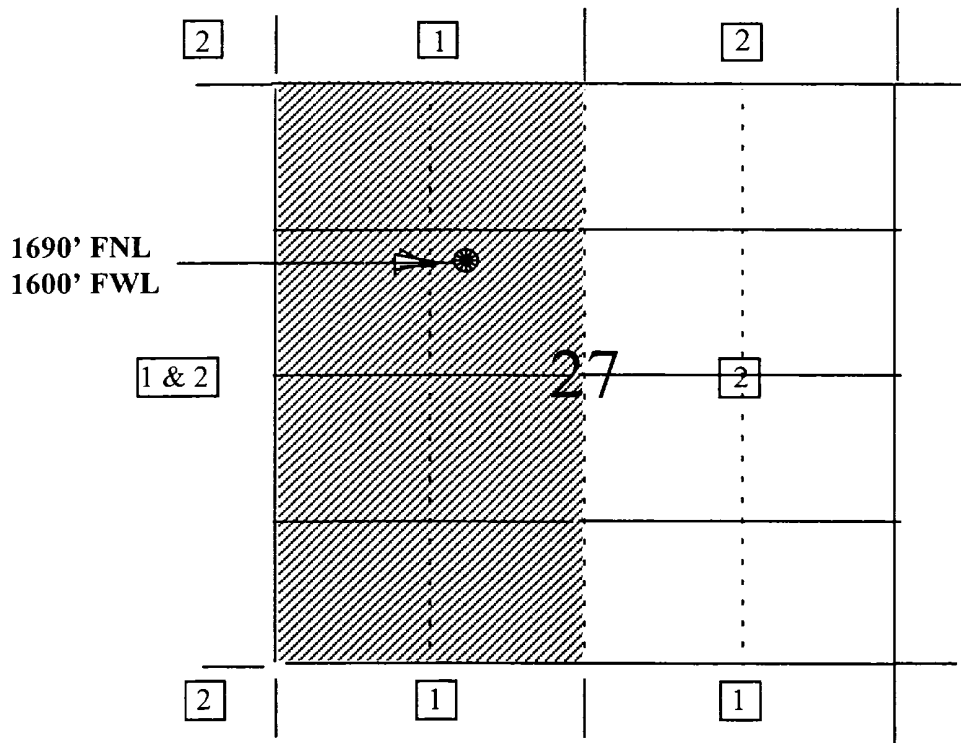
PA1=TERMINATE

BURLINGTON RESOURCES OIL AND GAS COMPANY

**Hancock #5A
OFFSET OPERATOR \ OWNER PLAT
Downhole Commingle**

Chacra / Mesaverde Formations Well

Township 28 North, Range 9 West



1) Burlington Resources

2) Conoco Inc.
Attn: Lori Thorpe
10 Desta Drive, Suite 100W
Midland, TX 79705-4500

DATE: February 01, 1999
NAME: HANCOCK 5A
FORM: CHACRA
LOCATION
UNIT: F
SEC: 27
TWN: 28N
RNG: 9W

3/86 * Lackey B LS 12A 14/71 (99) 0/0 [21]	[22]	[23] 5/96 * LACKEY 1M 18/14 (98) 0/0
6/75 * HANCOCK B #12 26/339 (98) 0/0 [28]	1/75 * LACKEY #8 0/226 (882) 0/0 HANCOCK 5A * [27]	1/75 * LACKEY #7 0/192 (892) 0/0 9/70 * LACKEY #2 8/201 (98) 0/0 6/75 * HANCOCK A #8 10/187 (98) 0/0 6/75 * HANCOCK #9 3/182 (98) 0/0 [26]
2/86 * MICHENER A #7 21/168 (99) 0/0 [33]	3/75 * LACKEY #9 19/328 (98) 0/0 5/74 * LACKEY #6 3/13/ (98) 0/0 [34]	8/95 * STOREY C 2M 38/59 (98) 0/0 3/75 * HANCOCK A #7 11/154(98) 0/0 3/75 * HANCOCK A #10 24/346(98) 0/0 [35]

R-9-W

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28
N

LEGEND

COMPLETION DATE

WELL NAME
MCF/D-CUM(MMF)
BOP/D-CUM(MBO)