

DATE IN 2/11/98	SUSPENSE 3/3/98	ENGINEER DC	LOGGED MV	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

1839

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling
☐ NSL ☐ NSP ☐ DD ☐ SD

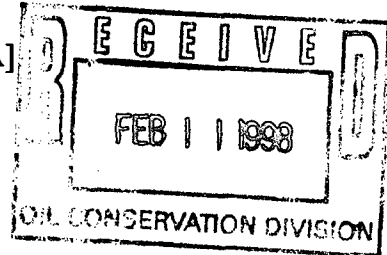
Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement

☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR



[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO

U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Bradfield

Print or Type Name

Signature

Regulatory/Compliance Administrator

Title

Date

2/10/98

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

Turner Hughes

#15A

I 3-27-9

San Juan, New Mexico

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7614 API NO. 30-045-26381 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	Otero Chacra - 82329		Blanco Mesaverde - 72319
2. Top and Bottom of Pay Section (Perforations)	3346' - 3574' (Estimated) Actual supplied upon completion		4714' - 5137'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Plan to Flow after Recompletion		Flowing
5. Bottomhole Pressure	(Current)	a.	Measured
Oil Zones - Artificial Lift: Estimated Current	a. 363 psia (est)		a. 133 psia
Gas & Oil - Flowing: Measured Current	(Original)		
All Gas Zones: Estimated or Measured Original	b. 1142 psia (est)	b.	b. 721 psia
6. Oil Gravity (°API) or Gas BTU Content	1160		1309
7. Producing or Shut-In?	Not Yet Producing		Producing
Production Marginal? (yes or no)	No		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 water of recent test (within 60 days)	Date: N/A Rates: N/A	Date: Rates:	Date: 1/98 Rates: 0.5 Bbls/d / 84 MCFD
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 Kevin L. Midkiff TITLE Production Engineer DATE 01-29-98TYPE OR PRINT NAME Kevin Midkiff 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 TURNER HUGHES (SF 078050)		Well No. 15A
Unit Letter I	Section 3	Township 27N	Range 9W	County San Juan	
Actual Footage Location of Well: 1490 feet from the South line and 920 feet from the East line					
Ground Level Elev: 6350	Producing Formation Mesa Verde/Chacra		Pool Blanco/Otero	Dedicated Acreage: 293.97 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.

RECEIVED

MAY 07 1985

BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

Sec. 3

3

920'

1490'

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.

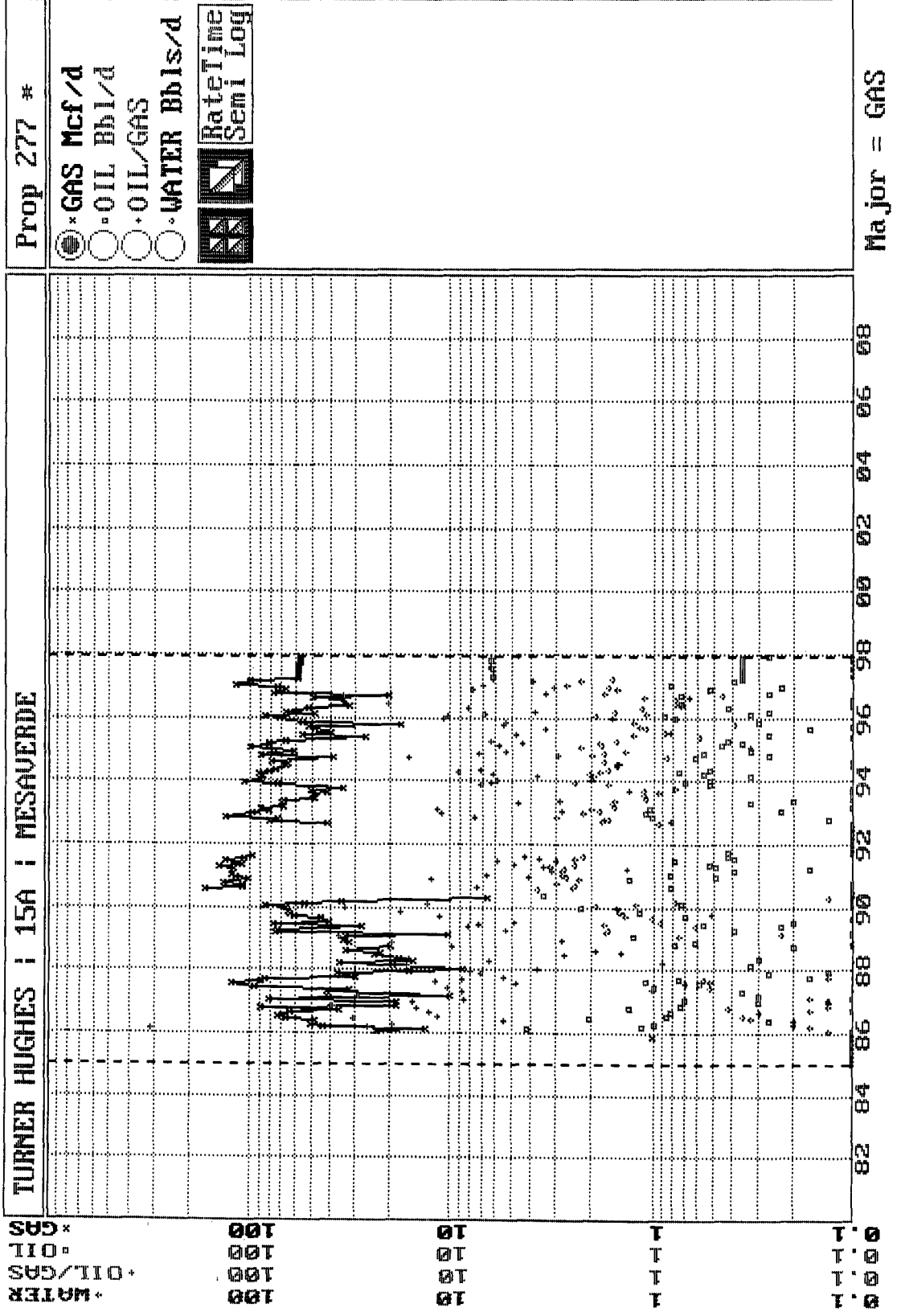
Date Surveyed

April 29, 1985

Registered Professional Engineer and Land Surveyor

Fred B. Kerr Jr.

Certificate No. 4, 1985



Turner Hughes #15A
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Mesaverde		Chacra	
<u>MV-Current</u>		<u>CK-Current *</u>	
GAS GRAVITY	0.775	GAS GRAVITY	0.669
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.59	%N2	0.31
%CO2	0.64	%CO2	0.28
%H2S	0	%H2S	0
DIAMETER (IN)	2.375	DIAMETER (IN)	4.5
DEPTH (FT)	4926	DEPTH (FT)	3460
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150	BOTTOMHOLE TEMPERATURE (DEG F)	101
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	117	SURFACE PRESSURE (PSIA)	333
BOTTOMHOLE PRESSURE (PSIA)	133.2	BOTTOMHOLE PRESSURE (PSIA)	362.7
<u>MV-Original</u>		<u>CK-Original *</u>	
GAS GRAVITY	0.775	GAS GRAVITY	0.669
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.59	%N2	0.31
%CO2	0.64	%CO2	0.28
%H2S	0	%H2S	0
DIAMETER (IN)	2.375	DIAMETER (IN)	4.5
DEPTH (FT)	4926	DEPTH (FT)	3460
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150	BOTTOMHOLE TEMPERATURE (DEG F)	101
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	624	SURFACE PRESSURE (PSIA)	1036
BOTTOMHOLE PRESSURE (PSIA)	721.0	BOTTOMHOLE PRESSURE (PSIA)	1142.1

* NOTE: Since the chacra is the recompletion target, we do not have pressure data for it in the Turner Hughes #15A. Therefore, data was taken from the Hancock A #10, located in section 35, T28N, R9W.

Page No.: 1

Print Time: Tue Dec 23 07:04:22 1997

Property ID: 277

Property Name: TURNER HUGHES | 15A | MESAVERDE

Table Name: S:\ARIES\1ROS\TEST.DBF

<u>--DATE--</u>	<u>---CUM GAS---</u>	<u>M SIWHP</u>
	<u>Mcf</u>	<u>Psi</u>

10/04/85	0	624.0	ORIGINAL
05/01/86	5493	524.0	
12/16/87	37520	451.0	
07/18/89	55952	440.0	
02/21/91	101081	281.0	
08/03/91	122833	293.0	
03/29/93	143213	298.0	
12/24/94	260343	117.0	CURRENT ESTIMATED FROM PZ DATA

Page No.: 1
Print Time: Wed Dec 24 16:12:31 1997
Property ID: 7528
Property Name: HANCOCK A | 10 | 45095A-1
Table Name: K:\ARIES\RR98PDP\TEST.DBF

OFFSET
CHACRA
WELL

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

12/18/74	0	1036.0	Original
01/03/75	0	1049.0	
04/11/75	13875	775.0	
04/14/76	58431	489.0	
06/28/77	90118	459.0	
04/05/93	297074	397.0	
12/26/97	339168	333.0	Current

Estimated from P/Z data

Package Preparation Volume Data

DPNo: 54058A TURNER HUGHES 15A Form: MV

Supt: 60 KEN RAYBON FF: 337 STEVE FLOREZ MS: 301 LONNIE CUNNINGHAM
Pipeline: EPNG Plunger: Yes Dual: No Compressor: No

Ownership (No Trust)			Prior Year			Current Year		
	Gas	Oil			Days			Days
				MCF/M	BOPM	On	MCF/M	BOPM
								On
GWl:	100.0000%	100.0000%	Jan	2,565	27.0	31	3,563	25.0
GNI:	75.0000%	75.0000%	Feb	1,449	10.0	29	3,069	12.0
			Mar	2,048	8.0	31	2,124	0.0
			Apr	1,549	13.0	30	3,431	24.0
			May	947	0.0	31	3,898	39.0
			Jun	1,021	22.0	30	2,932	18.0
			Jul	1,017	0.0	31	2,798	9.0
			Aug	1,486	1.0	31	3,251	19.0
			Sept	634	22.0	5.1	3,277	28.0
			Oct	2,353	8.0	15	3,568	19.0
			Nov	2,055	16.0	16	0	0.0
			Dec	2,256	7.0	17	0	0.0
			Total	19,380	134.0		31,911	193.0
Volumes								
(Days On)	MCFD	BOPD						
7 Day Avg	31	4.8						
30 Day Avg	84	0.5						
60 Day Avg	100	0.6						
3 Mo Avg	110	0.7						
6 Mo Avg	109	0.7						
12 MoAvg								
Volumes								
(Days in Month)	MCFD	BOPD						
30 Day Avg	84	0.5						
60 Day Avg	100	0.6						
3 Mo Avg	108	0.7						
6 Mo Avg	99	0.6						
12 Mo Avg								

Print Form

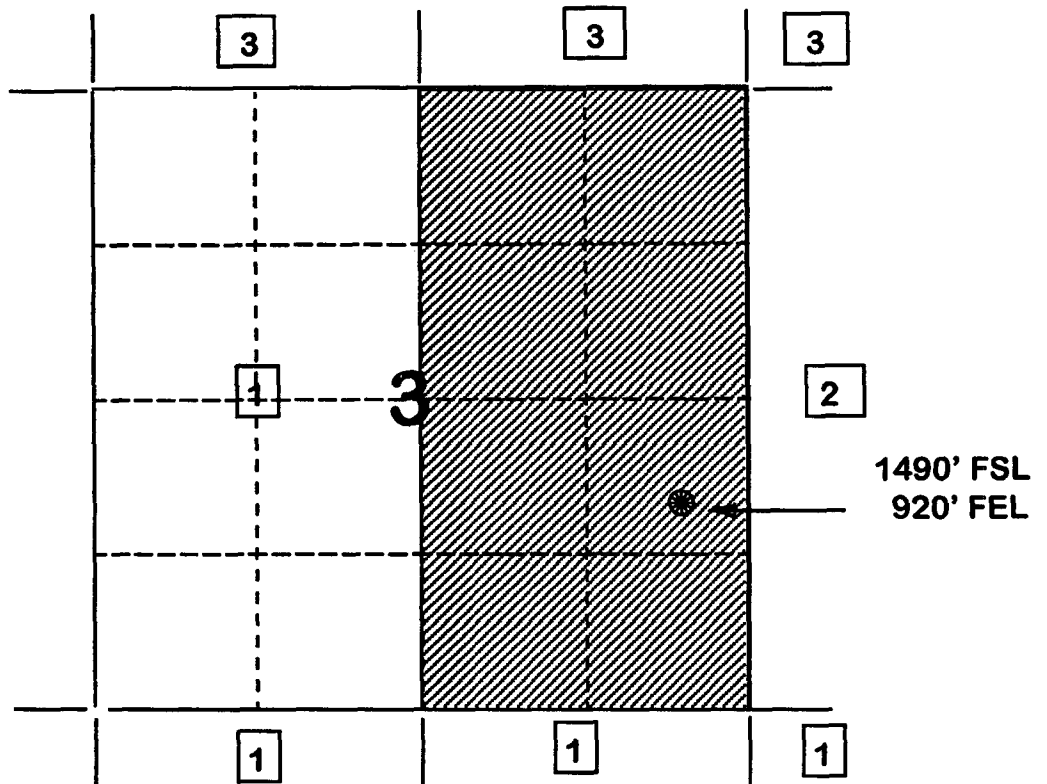
Exit Volumes Data

BURLINGTON RESOURCES OIL AND GAS COMPANY

**Turner Hughes #15A
OFFSET OPERATOR/OWNER PLAT**

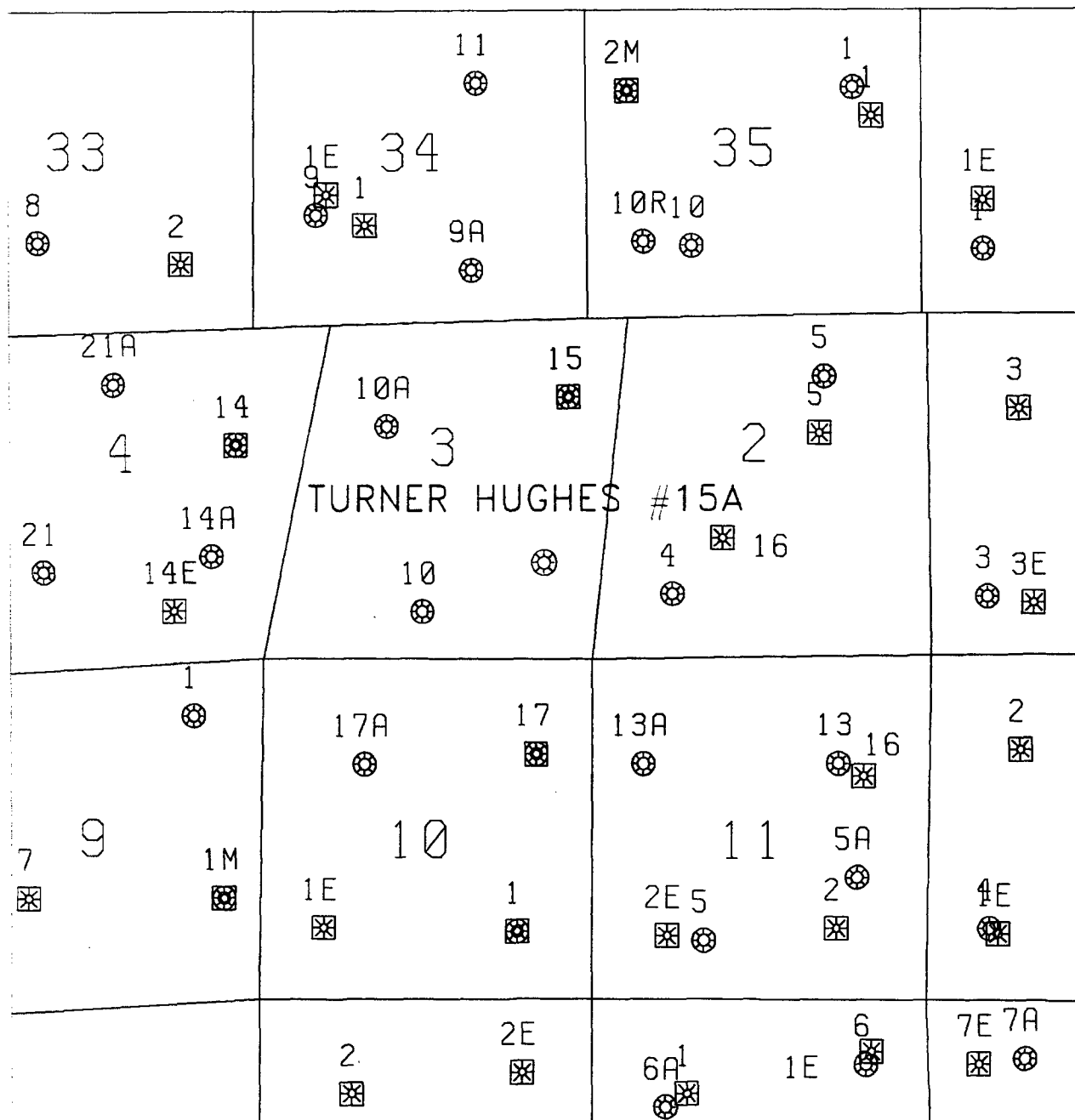
Chacra (SE/4) / Mesaverde (E/2) Formations Commingle Well

Township 27 North, Range 9 West



1) Burlington Resources
2) Four Star Oil & Gas Co.
c/o Texaco Exploration
P.O. Box 2100
Denver, CO 80201

3) Amoco Production Company
c/o Bruce Zimney
P.O. Box 800
Denver, CO 80201



LMO 2/5/98

TURNER HUGHES #15A

SEC. 3, T27N, R9W

CHACRA/MESAVERDE