

District I
1625 N. French Dr. Hobbs, NM 88240
District II
811 South Eirst Artesia NM 88210
District III
1000 Rio Brazes Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-107
Revised March 17, 1999

Filing instructions
At Bottom of Page

APPLICATION FOR MULTIPLE COMPLETION

Gruy Petroleum Management Co.

P.O. Box 140907 Irving, TX 75014

Operator

Address

Liberty 24 Federal Com

1

E

24

25S 26E

Eddy

Lease

Well No.

Unit Ltr. - See - Twp - Rge

County

All applicants for multiple completion must complete items 1 and 2 below.

1. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Cottonwood Draw; Upper Penn Wildcat		Cottonwood Draw; Morrow
b. Top and Bottom of Pay Section (Perforations)	10,236' - 10,409'		11,487' - 11,956'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing	RECEIVED OCT - 1 2004 OOD-ARTESIA	Flowing
e. Daily Production <input checked="" type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated Oil Bbls. Gas MCF Water Bbls.	1500 mcf estimate		2403 mcf 2 month average

2. The following must be attached:

- Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A)

OPERATOR:

I hereby certify above information is true and complete to best of my knowledge, and belief

Signature

Zeno Farris

Printed Name & Title Zeno Farris Manager Operations Admin.

Date 9-28-04

Telephone 972-401-3111

Oil CONSERVATION DIVISION

Approved by

TIM W. GUM
DISTRICT II SUPERVISOR

Title

Date

OCT 25 2004

NOTE: if the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

FILING INSTRUCTIONS:

- District Approval -- See Rule 112-A-B -- Submit 4 copies of Form C-107 with attachments to Division office.
- Division Director Administrative Approval -- See Rule 112-C -- Submit 2 copies of Form C-107 with attachments to Division office in Santa Fe and 2 copies of Form C-107 with attachments to appropriate district office.
- Multiple completions not qualifying for District or Division Director approval may be set for hearing as outlined in Rule 112-A-E.

GRUY PETROLEUM MANAGEMENT CO.

SPUDDED 1/28/04

LIBERTY 24 FED COM #1

API 30-015-33094

PROPOSED COMPLETION

Sherry Reid Carroll 9/8/04

1650' FNL & 1200' FWL
Sec 24, T-25-S, R-26-E

Eddy Co, New Mexico

KB: 3290'
DF: 3289'
GL: 3272'

Casing Strings:
2" Conductor

13-3/8" (17-1/2" hole), 54.5#, J-55
@ 440' w/ 490 sx cmt
TOC @ surface - circ

9-5/8" (12-1/4" hole), 40#, NS-110
@ 5808' w/ 1700 sx cmt
TOC @ surface - circ

7" (8-3/4" hole), 26#, P-110HC
@ 10369' w/ DV +/- 8322'
1st stg - 350 sx cmt (did not circ off DV)
2nd stg - NA - unable to open DV
TOC @ 6950' by CBL

4-1/2" (6-1/8" hole), 11.6#, P-110HC
10055-12300' w/ 235 sx cmt
TOC @ liner top (ratty top)

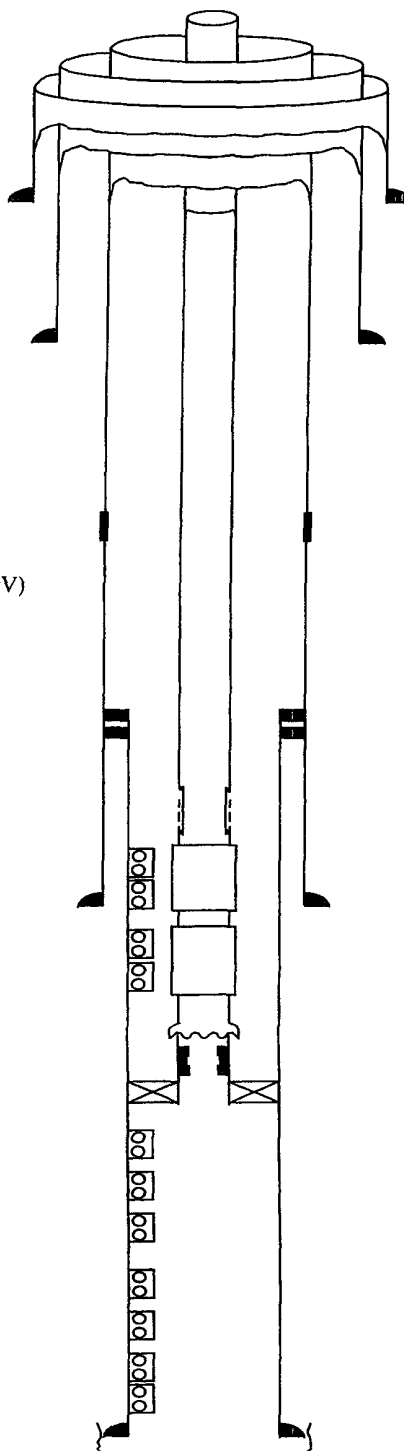
Cisco Perfs:
10236-45, 10249-59, 10264-70',
10330-38, 10346-54, 10366-76,
10386-96, 10401-09, 6 spf (9/?/04)

Morrow Perfs:
11512-16, 11592-95, 11626-39,
11682-87', 6 spf (9/?/04) - Stimgun

11487-506, 11533-39, 11573-80,
11642-49', 6 spf (8/21/04)
11487-506 - Frac'd, others - Stimgun

11700-32, 11804-16', 6 spf (8/11/04)
Frac'd

11866-72, 11880-93, 11918-26,
11951-56', 6 spf (5/6/04) - Frac'd



TUBING:
2-3/8" x 2-7/8" L-80

NOTE:
Cisco will flow up csg annulus.
Morrow will flow up tubing.

Sliding sleeve +/- 10215' (closed)

50' blast joints +/- 10230-10280'

90' blast joints +/- 10325-10415'

4-1/2" VersaSet (wls) pkr
w/ 1.78" F @ 10550'

PBTD 12215'

TD = 12,300'

RECOMMENDED COMPLETION PROCEDURE – Part 7

LIBERTY 24 FED COM #1

EDDY COUNTY, NEW MEXICO

WELL DATA

SPUD DATE: 1/28/04
PERM. ZERO PT.: KB=3290', DF=3289', GL=3272'
TOTAL DEPTH: 12,300'
SURFACE CSG: 13-3/8" (17-1/2" hole), 54.5#, J-55 @ 440'
INTER CSG: 9-5/8" (12-1/4" hole), 40#, NS-110 @ 5808'
PROD CSG: 7" (8-3/4" hole), 26#, P-110HC @ 10369' w/ DV +/- 8322'
DV tool failed to open - Csg tested to 2500 psi w/ 12.6 ppg mud
PROD LNR: 4-1/2" (6-1/8" hole), 11.6#, P-110HC liner from 10055-12303'
PERFS (OPEN): 11487-11506'
PERFS (Shut-off): 11533-11539, 11573-11580, 11642-11649'
11700-11732, 11804-11816'
11866-11872, 11880-11893, 11918-11926, 11951-11956'
PERFS (PROP): 11512-11516, 11592-11595, 11626-11639, 11682-11687'
Cisco: 10236-10245, 10249-10259, 10264-10270, 10330-10338,
10346-10354, 10366-10376, 10386-10396, 10401-10409'

OBJECTIVE : Finish Morrow completion then perf Cisco and dual well.

*** * * * * SAFETY IS TOP PRIORITY * * * * ***

PROCEDURE:

1. Rls pkr and POH pulling carefully through csg problem @ 10784'.
2. RIH w/ bit on 2-3/8" x 2-7/8" workstring to +/- 7000'.
3. Rig up Air/Foam Unit. Break circulation and continue in hole.
4. Wash sand and drill composite bridge plugs (11528', 11550' – set @ 11690', and 11855') to PBTD. Circ cln. POH.
5. MIRU HOWCO. Install lubricator. RIH w/ GR & JB to +/- 11700'. RIH w/ 2-3/4" csg gun and GR/CCL tools. Run strip log to get on depth. Perforate Morrow 11512-11516, 11592-11595, 11626-11639 and 11682-11687', 6 spf by HOWCO Spectral Density Dual Spaced Neutron GR Log (Runs TWO & THREE) dated 4/26/04.

NOTE: Verify fluid level on last run as Stim Tube will require fluid around tube and +/- 1000 psi fluid hydrostatic head to shoot.

6. RIH w/ 2" StimGun Propellant tubes and shoot as follows:
 - a. 3' tube across 11512-11515'
 - b. 3' tube across 11534-11537'
 - c. 4' tube across 11574-11578'
 - d. 2' tube across 11592-11594'
 - e. 7' tube across 11628-11635'
 - f. 3' tube across 11683-11686' (after shooting, lower weight bars thru all perfs to PBTD)
7. RIH w/ GR & JB to 10600. WL set production pkr w/ blanking plug +/- 10550'. Load well w/ 7% KCL wtr and test.
8. WL set RBP +/- 10500'. Load csg and pressure test plug. Dump 2 sx sand on RBP.
9. RIH w/ 3-3/8" csg gun and GR/CCL tools. Run strip log to get on depth. Perforate Cisco 10236-10245, 10249-10259, 10264-10270, 10330-10338, 10346-10354, 10366-10376, 10386-10396 and 10401-10409', 6 spf by HOWCO Spectral Density Dual Spaced Neutron GR Log (Run TWO) dated 4/8/04 which correlates flat to HOWCO GR/CCL/Radial Bond log dated 4/23/04. RD e-line.
- NOTE:** Check pressure after perforating. Used 12.6 ppg mud during drilling. Have pkr w/ plug on location ready to set w/ wireline.
10. RIH w/ 4-1/2" pkr on 2-3/8" x 2-7/8" workstring. Set pkr +/- 10300'. Load tbg and breakdown perfs 10330-10409'. Pump 25 bbls 7% KCL wtr to verify perfs can be pumped into. SI. Record ISIP and 15 min SIP.
11. Load annulus and breakdown perfs 10236-10269'. Pump 15 bbls 7% KCL wtr to verify perfs can be pumped into. SI. Record ISIP and 15 min SIP.
12. Rls pkr. PU & set pkr +/- 10150'.
13. Swab test perfs 10236-10409'.
14. If additional stimulation required, MIRU HOWCO acid pumping equipment. Install wellhead isolation tool. Install pump and pop-off set for 2000 psi on annulus. Bring annulus pressure up to 1500 psi as needed during job. Pressure test lines to 11000 psi. Acidz Cisco 10236-10409' w/ 7500 gals 15% NEFE HCL in 3 stages (5-8 BPM w/ max pressure of 10000 psi) as follows:
 - a. Pump 1500 gals 15% NEFE HCL
 - b. Pump 350 gals GSB + 700# 50:50 mix of GRS & 100 mesh salt
 - c. Pump 2250 gals 15% NEFE HCL
 - d. Pump 350 gals GSB + 700# 50:50 mix of GRS & 100 mesh salt (adjust as needed)
 - e. Pump 3750 gals 15% NEFE HCL
 - f. Flush w/ 7% KCL wtr
 - g. RD HOWCO
 - h. Remove wellhead isolation tool.
 - i. Open well to flow back. Swab if necessary.
15. Load tbg. Rls pkr and POH.

16. PU & RIH w/ ret tool on 2-3/8" x 2-7/8" workstring. Circ gun debris/sand off RBP. If necessary, RU Air/foam unit to circ debris and sand from RBP.
17. Latch RBP & POH laying down workstring.
18. PU & RIH w/ on/off tool, +/- 120' 2-3/8" tbg, 90' blast joints, +/- 45' 2-3/8" tbg, 50' blast joints, 1 jt tbg, sliding sleeve (opens up & closes down), +/- 180' 2-3/8" tbg and 2-7/8" tbg to pkr @ 10550'. Space blast joints across perms 10236-10270 and 10330-10409. Run sliding sleeve in open position unless Cisco interval will not need to be swabbed in to flow.
19. Latch pkr and space out tbg. Rls and load annulus w/ pkr fluid. Re-latch pkr.
20. ND BOP's. NU wellhead to produce Cisco up annulus and Morrow up tbg w/ separate measurement.
21. If sleeve was run in open position, swab tbg to unload Cisco. RU slickline. Close sliding sleeve.
22. Pull blanking plug. RD slickline.
23. Swab in Morrow if necessary.
24. Put both sides on production and test. RD & RR.
25. After rate stabilizes, SI for 24 hrs. Run pkr leakage test and run 4 pt test on Cisco.
26. Return well to production.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1984
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT III
1000 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-33094	Pool Code	Pool Name Cottonwood Draw; Morrow
Property Code	Property Name LIBERTY 24 FEDERAL COM	Well Number 1
OGRID No. 162683	Operator Name GRUY PETROLEUM MANAGEMENT CO.	Elevation 3272'

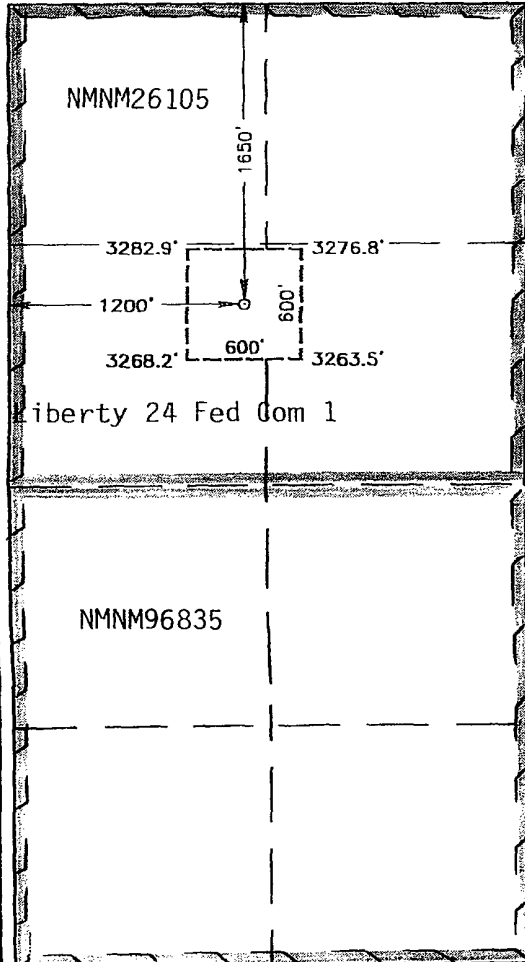
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	24	25-S	26-E		1650'	NORTH	1200'	WEST	EDDY

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
Dedicated Acres 320	Joint or Infill N	Consolidation Code C	Order No. Pending						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>GEODETIC COORDINATES NAD 27 NME Y= 406672.2 N X= 525639.3 E LAT.= 32°07'04.91"N LONG.= 104°15'01.86"W</p>
	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Zeno Farris</i> Signature Zeno Farris Printed Name Manager Operations Admin Title September 27, 2004 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>August 07, 2003</p> <p>Date Surveyed Signature Professional Surveyor Seal of Professional Surveyor Certificate No. RONALD E. EDSON 3238 GARY EDSON 12641</p>

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II

P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III

1000 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV

P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-33094	Pool Code	Pool Name Cottonwood Draw; Upper Penn
Property Code	Property Name LIBERTY 24 FEDERAL COM	Well Number 1
GRID No. 162683	Operator Name GRUY PETROLEUM MANAGEMENT CO.	Elevation 3272'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	24	25-S	26-E		1650'	NORTH	1200'	WEST	EDDY

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

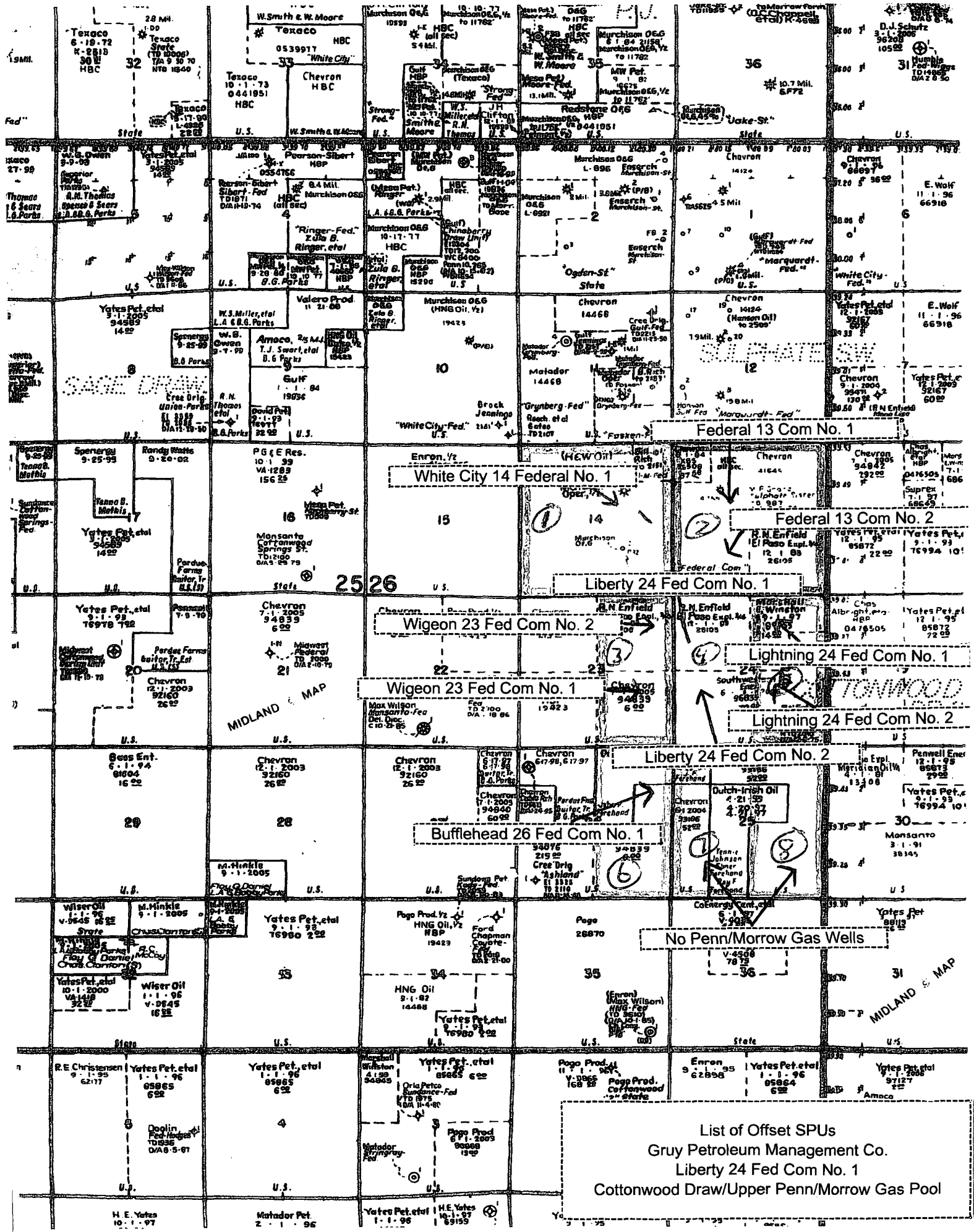
Dedicated Acres 320	Joint or Infill N	Consolidation Code C	Order No. Pending
------------------------	----------------------	-------------------------	----------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>GEODETIC COORDINATES NAD 27 NME Y= 406672.2 N X= 525639.3 E LAT.= 32°07'04.91"N LONG.= 104°15'01.86"W</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Zeno Farris</i> Signature Zeno Farris Printed Name Manager Operations Admin Title September 27, 2004 Date</p>
		<p>SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>August 07, 2003</p> <p>Date Surveyed AWB</p> <p>Signature & Seal of Professional Surveyor <i>Ronald E. Edson</i> 8/11/03 03.11.08375</p> <p>Certificate No. RONALD E. EDSON 3239 CARL EDSON 12641</p>

List of Offset SPU's
GRUY PETROLEUM MANAGEMENT CO.
Liberty 24 Fed Com # 1
Cottonwood Draw Upper Penn/Morrow Gas Pool

<u>OFFSET SPU</u>	<u>COLOR CODE</u>	<u>Well Name</u>	<u>Location</u>	<u>OPERATOR</u>	<u>ACERAGE DESCRIPTION</u>	<u>ACRES</u>
1	Bule	White City 14 Federal 1	G-14-25-26	Gruy Pet. Management Co.	All Sec. 14 T-25S-R-26E	640
2	Brown	Federal 13 Com 1 Federal 13 Com 2	F-13-25-26 K-13-25-26	Gruy Pet. Management Co.	All Sec. 13 T-25S-R-26E	640
3	Red	Wigeon 23 Fed Com 1 Wigeon 23 Fed Com 2	J-23-25-26 H-23-25-26	Gruy Pet. Management Co.	E/2 Sec. 23 T-25S-R-26E	320
4	Yellow	Liberty 24 Fed Com 1 Liberty 24 Fed Com 2	E-24-25-26 K-24-25-26	Gruy Pet. Management Co.	W/2 Sec. 24 T-25S-R-26E	320
5	Green	Lightning 24 Fed Com 1 Lightning 24 Fed Com 2	B-24-25-26 J-24-25-26	Samson Resources Co. Two W 2nd St Tulsa OK 74103	E/2 Sec. 24 T-25S-R-26E	320
6	Purple	Bufflehead 26 Fed Com 1	H-26-25-26	Gruy Pet. Management Co.	E/2 Sec. 26 T-25S-R-26E	320
7	Orange	No Penn/Morrow Gas Wells		Gruy Pet. Management Co.	W/2 Sec. 25 T-25S-R-26E	320
8	Orange	No Penn/Morrow Gas Wells		Gruy Pet. Management Co.	E/2 Sec. 25 T-25S-R-26E	320



List of Offset SPUs
Gruy Petroleum Management Co.
Liberty 24 Fed Com No. 1
Cottonwood Draw/Upper Penn/Morrow Gas Pool



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

COMMINGLING ORDER PC-1127

Gruy Petroleum Management Company
PO Box 140907
Irving, Texas 75014-0907

Attention: Mr. Zeno Farris

RECEIVED

NOV 22 2004

~~OOD-ARTESIA~~

The above named company is hereby authorized to surface commingle Cottonwood Draw-Morrow Gas (97377) and Undesignated White City-Penn Gas (87280) Pool production from the following-described federal lease in Eddy County, New Mexico:

Lease: NMNM26105 and NMNM96835
Description: W/2 of Section 24, T-25 South, R-26 East, NMPM;
Well: Liberty 24 Federal Com Well No. 1 (API No. 30-015-33094) located in Unit E
Pools: Dually completed in the Morrow Gas and Upper Pennsylvanian Gas Reservoirs.

Production shall be allocated by separately metering the gas production from each pool producing from this dually-completed well prior to commingling.

NOTE: It is the responsibility of the producer to notify the transporter of this commingling authority.

FURTHER: The operator shall notify the supervisor of the Artesia district office prior to implementation of this commingling operation.

DONE at Santa Fe, New Mexico, on this 8th day of November 2004.

Mark E. Fesmire, P.E.

Director

MEF: wvjj

cc: Oil Conservation Division – Artesia
Bureau of Land Management – Carlsbad