



6775

HEYCO ENERGY GROUP, INC.

Harvey E. Yates Company • Rosetta Energy Partners, L.P. • HEYCO International, Inc.

March 17, 2014

Bureau of Land Management
Carlsbad Field Office
620 E. Greene St.
Carlsbad, New Mexico 88220

Attention: Deputy Minerals Manager for Oil and Gas

Re: Young Deep Unit
Contract #14-08-0001-18042
T-18S, R-32E, N.M.P.M.
Lea County, New Mexico
2014 Plan of Development
and Operation

RECEIVED OGD
2014 MAR 19 A 2:12

Ladies & Gentlemen:

Harvey E. Yates Company (HEYCO) as Unit Operator, submits its 2014 Plan of Development and Operation (in triplicate) as prescribed by Section 10 of the Young Deep Unit Agreement. HEYCO is once again submitting this as Operator, as our Joint Venture arrangement with Nadel and Gussman HEYCO, LLC, is currently terminating and Change of Operator notifications will shortly be submitted on all unit wells. This plan covers the Participating Areas for the Bone Spring, Delaware, Wolfcamp and Morrow Formations in the Young Deep Unit.

In this regard, we are enclosing a current unit map showing all existing wells, roads and flowlines, and maps showing the current participating area boundaries. Maps showing CONFIDENTIAL geologic data pertinent to the producing formations have not changed since the 2013 POD, but are also enclosed. A complete updated well listing, showing the status of all wells thru 2013, is also included.

Nearly all of the Young Deep Unit wells produce from the Bone Spring Fm. in the Young, North Pool. Exceptions are the three water injection wells (YDU #5, YDU 3 Fed. #1 and YDU #16 (recently reactivated) utilized for Bone Spring Carbonate pressure maintenance, two wells producing from the Delaware Mountain Group (YDU #28 and #34), and one current Wolfcamp producer (YDU #1). The following Unit wells have been permanently plugged: YDU #3 (12/4/1984), YDU #19 (6/16/1986), YDU #35 (6/12/1992), YDU 3 Fed. #3 (8/6/1993), YDU #27 (12/15/1993), YDU 4 Fed. #1 (8/8/1996), YDU #2 (8/17/2005), YDU 3 Federal #4 (3/29/2011) and the YDU #4 (8/26/2011). (See the enclosed status list of Unit wells.)


HEYCO is continuing to evaluate ongoing technological advances in stimulation and horizontal drilling. The tight Bone Spring Sands in the northern Delaware Basin of Southeast New Mexico, which produce in the Unit, have seen aggressive industry activity in the last 5 years driven by horizontal drilling and fracture stimulation advances. HEYCO is hesitant to

proceed quickly with horizontal drilling plans because of the results from the re-entry of the plugged YDU #14 in 2005. The horizontal lateral (the #14H) in the Bone Spring 2nd Sand (see attached Unit Type Log) was drilled as a slim hole out of the existing 5 1/2" casing. A thorough review of the drilling and completion operations and production data has determined that horizontal drilling in old well workovers are unsuitable for infill development of the Young Deep Unit because of mechanical and pressure limitations; therefore, HEYCO will not be re-entering additional YDU wells for the drilling of slimhole horizontal laterals. HEYCO has, however, APD'd a horizontal test in the S/2S/2 of Section 10 for possible drilling in late 2014. This well would offset the Devon completed (3/2012) horizontal 2nd Bone Spring Sand well in the N/2N/2 of Section 15, T18S-R32E. HEYCO has been evaluating the economics of this completion and later this year could propose to our unit partners the YDU #40H test. The early 2012 workover completion of the YDU #39 in the SE/4 of Section 10, T18S-R32E into the Bone Spring 2nd Sand, while successful, has not been totally encouraging in economic support of drilling the YDU #40H.

Important 2013 NGH unit operations were limited to the plugging of the Young Deep Unit #14H. In 2014, HEYCO will evaluate the completion and production data from the new offsetting Mewbourne Young 16 NC State Com #1H well completed 12/2/2013. Information from this well may encourage HEYCO to pursue the horizontal drilling of the S/2S/2 of Sec. 9 (Young Deep Unit #31H) which as of yet, has not been APD'd. The YDU #39 workover mentioned above resulted in the unit not having an active gas well within any Morrow proration unit and participating area. Gas zones that have been left or bypassed due to current economic expectations will be addressed in future POD submittals, should gas prices rebound. HEYCO also expects future horizontal unit activity for the lower Wolfcamp/Penn Shale interval as Permian Basin operators including HEYCO exploit this developing play northward from deeper in the Delaware Basin.

Based on the information submitted herewith, HEYCO respectfully requests the Bureau of Land Management approve this 2014 Plan of Development and Operation. We will be glad to supply further information, if such is required.

Respectfully submitted,


Melissa Randle
Senior Landman

MVR/GKY/CB/vw
Enclosures

YDUPOD2014.doc/Land:YDU#3

xc: Oil Conservation Division (w/encl.)
1220 S. St. Francis Dr.
 Santa Fe, New Mexico 87505
Attn: Sr. Petroleum Geologist

**DOI Bureau of Land Management - CARLSBAD FIELD OFFICE
YOUNG DEEP UNIT POD ATTACHMENTS**

Status of all Wells within the Unit 2013

| # | WELL NAME AND NUMBER | API NUMBER | COMP DATE | PROD ZONE | STATUS |
|-----|-------------------------|----------------|------------|-------------|---------------------|
| 1. | YOUNG DEEP UNIT 1 | 30025266400003 | 10/30/1990 | WOLFCAMP | ACTIVE |
| 2. | YDU 2 | 30025271210000 | 8/17/2005 | | P&A |
| 3. | YDU 3 | 30025272290000 | 12/04/1984 | | D&A - PLUGGED |
| 4. | YDU 4 | 30025273000000 | 7/2/1981 | | P&A |
| 5. | YDU 5 | 30025273360000 | 10/31/1983 | BONE SPRING | ACTIVE-WIW |
| 6. | YDU 6 | 30025274770001 | 4/21/1994 | BONE SPRING | ACTIVE |
| 7. | YDU 7 | 30025275470001 | 11/29/1994 | BONE SPRING | ACTIVE |
| 8. | YDU 8 | 30025275350201 | 11/19/1987 | BONE SPRING | ACTIVE |
| 9. | YDU 9 | 30025284000001 | 10/23/2009 | BONE SPRING | ACTIVE |
| 10. | YDU 10 | 30025284730000 | 2/3/1984 | BONE SPRING | ACTIVE |
| 11. | YDU 11 | 30025287930001 | 12/25/1993 | BONE SPRING | ACTIVE |
| 12. | YDU 12 | 30025308660000 | 4/6/1990 | BONE SPRING | ACTIVE |
| 13. | YDU 13 | 30025289660000 | 12/20/1985 | BONE SPRING | ACTIVE |
| 14. | YDU 14H | 30025290150101 | 12/16/2005 | | P&A 8/2013 |
| 15. | YDU 15 | 30025290460000 | 7/5/1985 | BONE SPRING | ACTIVE |
| 16. | YDU 16 | 30025290470000 | 3/30/1993 | BONE SPRING | ACTIVE-WIW |
| 17. | YDU 17 | 30025290600000 | 4/17/1985 | BONE SPRING | ACTIVE |
| 18. | YDU 18 | 30025313590000 | 9/27/1991 | BONE SPRING | ACTIVE |
| 19. | YDU 19 | 30025292780000 | 6/16/1986 | | D&A - PLUGGED |
| 20. | YDU 20 | 30025309240000 | 11/21/1990 | BONE SPRING | ACTIVE |
| 21. | YDU 21 | 30025322880001 | 9/4/2009 | BONE SPRING | ACTIVE |
| 22. | YDU 22 | 30025292530000 | 7/6/1985 | BONE SPRING | ACTIVE |
| 23. | YDU 23 | 30025298960000 | 1/9/1988 | BONE SPRING | ACTIVE |
| 24. | YDU 24 | 30025307830000 | 7/26/1990 | BONE SPRING | ACTIVE |
| 25. | YDU 25 | 30025331730000 | 1/22/1996 | BONE SPRING | ACTIVE |
| 26. | YDU 26 | 30025309520000 | 10/5/1990 | BONE SPRING | ACTIVE |
| 27. | YDU 27 | 30025309760000 | 12/15/1993 | | D&A - PLUGGED |
| 28. | YDU 28 | 30025310480000 | 4/3/1992 | DELAWARE | ACTIVE |
| 29. | YDU 29 | 30025312990000 | 9/12/1991 | BONE SPRING | ACTIVE |
| 30. | YDU 30 | 30025331740000 | 12/22/1995 | BONE SPRING | ACTIVE |
| 31. | YDU 31 | 30025310930000 | 5/13/1991 | BONE SPRING | ACTIVE |
| 32. | YDU 32 | 30025333150000 | 4/14/1996 | BONE SPRING | ACTIVE |
| 33. | YDU 33 | 30025334620000 | 8/24/1996 | BONE SPRING | ACTIVE |
| 34. | YDU 34 | 30025314670000 | 12/24/1991 | DELAWARE | ACTIVE |
| 35. | YDU 35 | 30025315960000 | 6/12/1992 | | D&A - PLUGGED |
| 36. | YDU 36 | 30025336420000 | 11/28/1996 | BONE SPRING | ACTIVE |
| 37. | YDU 37 | 30025336430000 | 12/14/1996 | BONE SPRING | ACTIVE |
| 38. | YDU 38 | 30025338640000 | 12/25/1997 | BONE SPRING | ACTIVE |
| 39. | YDU 39 | 30025381790001 | 4/6/2007 | BONE SPRING | ACTIVE-RECOMPL 2012 |
| 40. | YDU 40H | 3002540820 | | BONE SPRING | PROPOSED NEW DRILL |
| 41. | YOUNG DEEP UNIT 3 FED 1 | 30025273690000 | 12/1/1990 | BONE SPRING | ACTIVE-WIW |
| 42. | YDU 3 FED-2 | 30025289070000 | 11/19/1984 | BONE SPRING | ACTIVE |
| 43. | YDU 3 FED-3 | 30025275340000 | 8/6/1993 | | P&A |
| 44. | YDU 3 FED-4 | 30025284810000 | 4/18/1984 | | P&A |
| 45. | YDU 3 FED-5 | 30025287180000 | 6/30/1984 | BONE SPRING | ACTIVE |
| 46. | YDU 4 FED-1 | 30025268130000 | 8/8/1996 | | P&A |
| 47. | YDU 4 FED-2 | 30025276790102 | 5/7/1995 | BONE SPRING | ACTIVE |
| 48. | YDU 4 FED-3 | 30025292680000 | 10/3/1985 | BONE SPRING | ACTIVE |

SUMMARY

YDU WELLS WITH INDIVIDUAL TANKS

| |
|-------------------|
| YOUNG DEEP UNIT 1 |
| YDU 12 |
| YDU 18 |
| YDU 20 |
| YDU 23 |
| YDU 24 |
| YDU 25 |
| YDU 28 |
| YDU 29 |
| YDU 30 |
| YDU 31 |
| YDU 32 |
| YDU 33 |
| YDU 34 |
| YDU 36 |
| YDU 37 |
| YDU 38 |
| YDU 39 |

YDU WELLS GOING TO YDU 1 - BATTERY

| |
|-------------|
| YDU 6 |
| YDU 7 |
| YDU 8 |
| YDU 9 |
| YDU 10 |
| YDU 21 |
| YDU 26 |
| YDU 4 FED-2 |

YDU WELLS GOING TO YDU 25 - BATTERY

| |
|--------|
| YDU 25 |
| YDU 30 |
| YDU 32 |
| YDU 33 |

YDU WELLS GOING TO YDU 36 - BATTERY

| |
|--------|
| YDU 36 |
| YDU 37 |

YDU WELLS GOING TO YDU 11 - BATTERY

| |
|--------|
| YDU 4 |
| YDU 11 |
| YDU 13 |
| YDU 15 |
| YDU 17 |
| YDU 22 |

YDU WELLS GOING TO YDU 3 FED 1 - BATTERY

| |
|-------------|
| YDU 3 FED 2 |
| YDU 3 FED 4 |
| YDU 3 FED 5 |

YDU WELLS GOING TO YDU 4 FED 1 - BATTERY

| |
|-------------|
| YDU 4 FED 3 |
|-------------|

YDU WELLS BY PARTICIPATING AREA

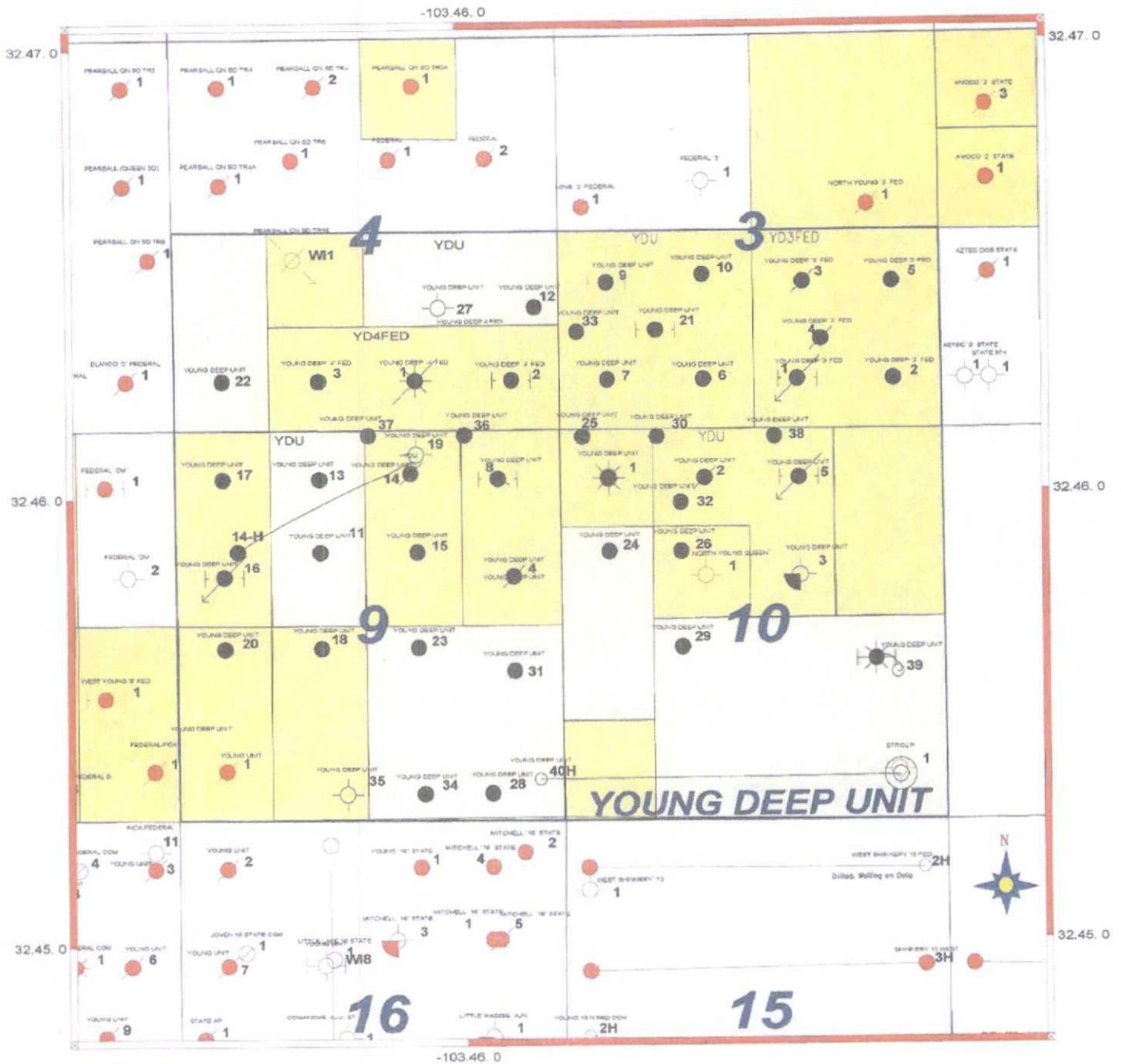
MORROW:
None

WOLFCAMP:
YDU 1

DELAWARE:
YDU 28
YDU 34

BONE SPRING:
ALL OTHERS

| | |
|--------------------------|--|
| 2010 UNIT ACTIVITY | MAINTENANCE ONLY - EVALUATE 2009 WO's |
| 2011 UNIT ACTIVITY | YDU 3 FED 4 - P&A, YDU 4 - P&A |
| 2012 UNIT ACTIVITY | YDU #39 RECOMPLETED IN TO BONE SPRING FM. 1/2012 |
| 2013 UNIT ACTIVITY | YDU #14H - P&A 8/2013 |
| 2014-15 PLANNED ACTIVITY | RECLAMATION OF YDU 14H WELL SITE DRILL YDU 40H HORIZONTAL 2ND BONE SPRING SAND TEST EVALUATE HZ FOR OFFSET DEVELOPMENT - #41H & #42H |

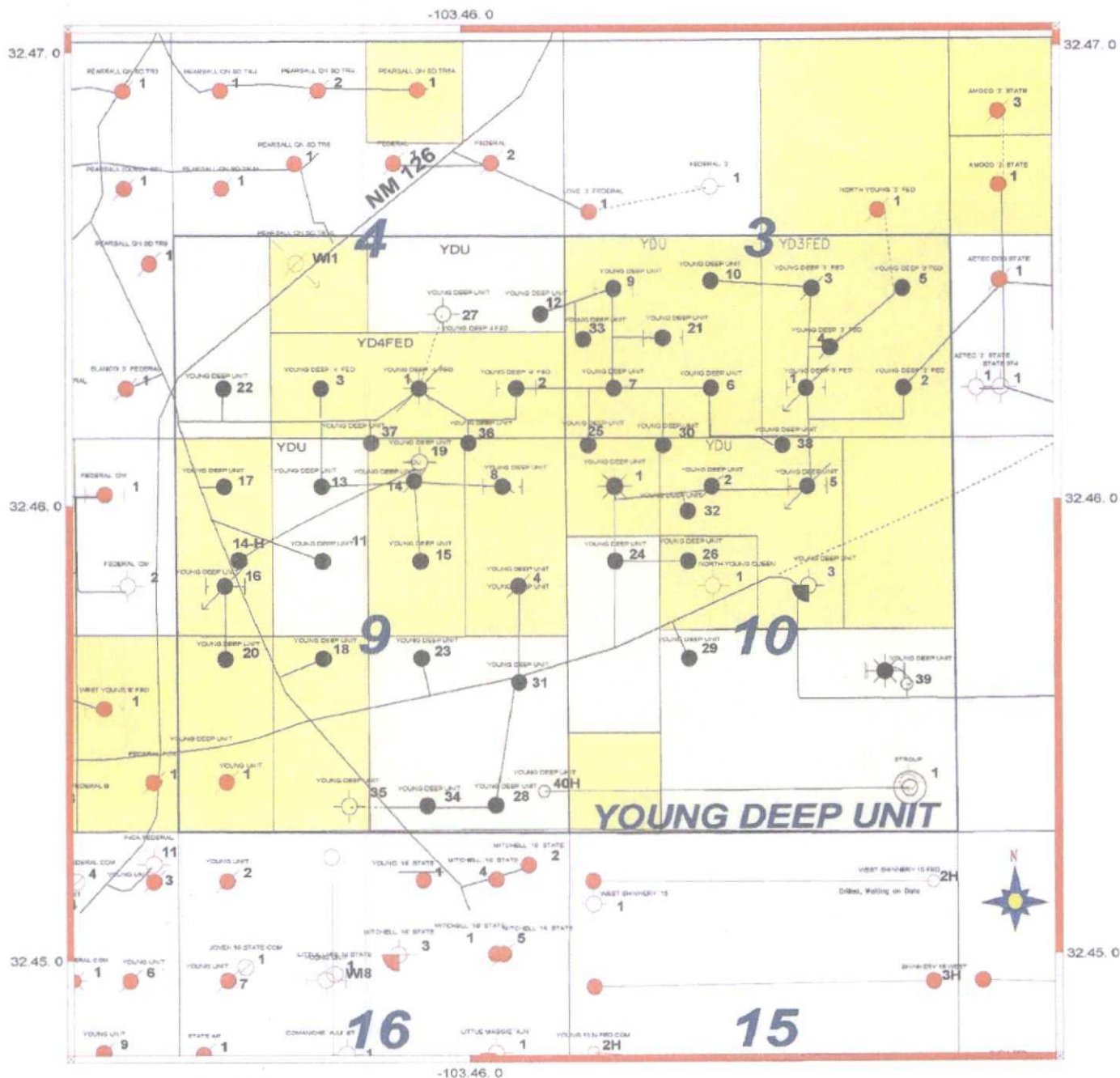


UNIT WELLS IN BLACK
NON-UNIT WELLS IN RED

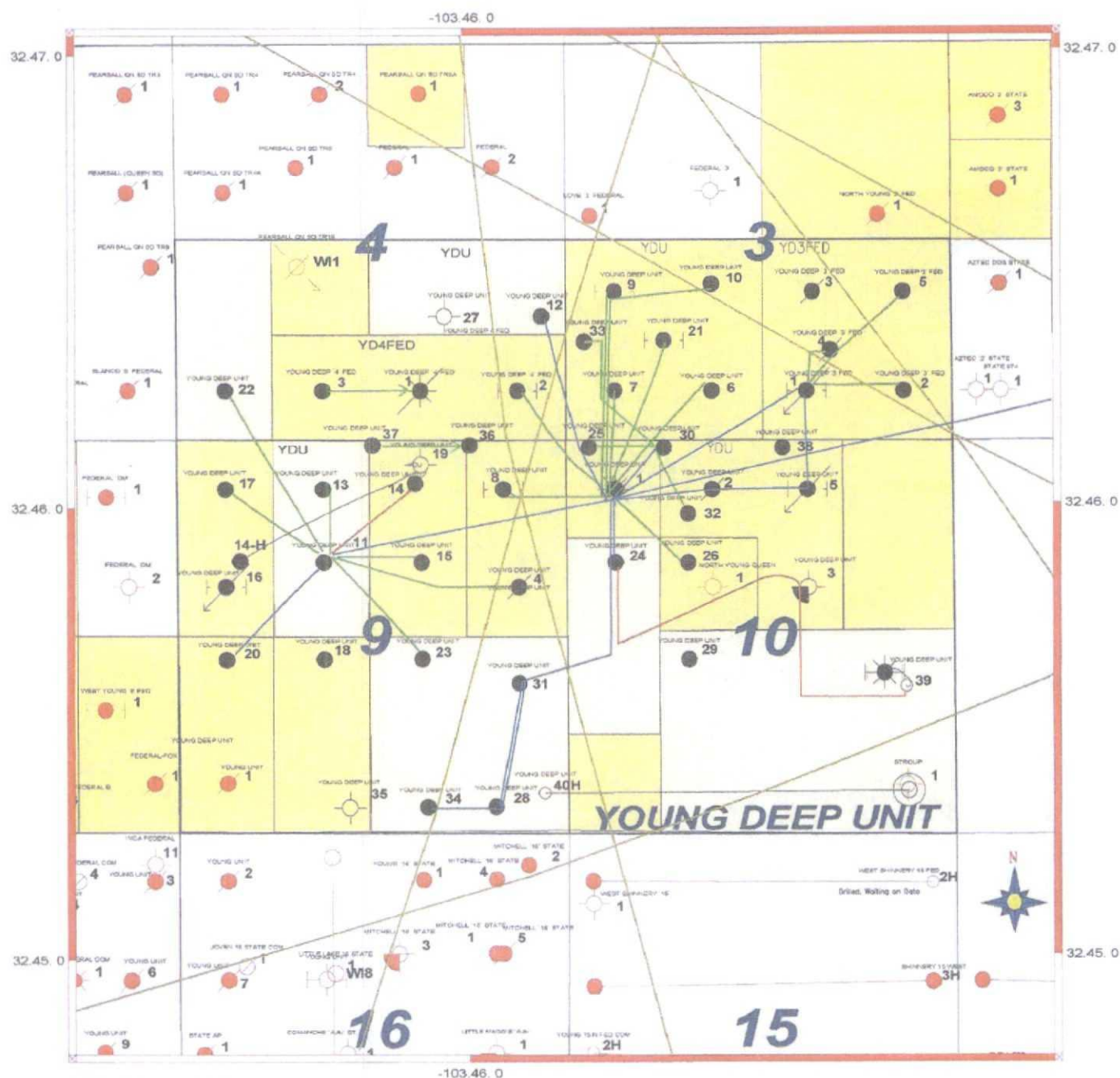
Scale 1:24000.



| LEGEND | | | |
|--------|--------------------------------------|--|----------------|
| • | Abandoned Location | HARVEY E. YATES COMPANY YOUNG DEEP UNIT T-18-S, R-32-E LEA COUNTY, NEW MEXICO | |
| ◊ | Dry and Abandoned | | |
| ✱ | Gas Well | | |
| ◦ | Location - Active or Proposed | | |
| • | Oil Well | | |
| ✱ | Plugged and Abandoned Oil Well | | |
| ✱ | Oil Well converted to water injector | | |
| ✱ | Oil Well Workover | | |
| ✱ | Gas Well Plugged and Abandoned | | |
| ✱ | Injector - Plugged | | |
| | | Suzi Yahney | 1" = 2,000 ft. |
| | | UNIT Wells BLACK | Scale 1:24000. |
| | | | 3/14/2014 |
| | | | YDU_POD.gpf |



| LEGEND | | | |
|-------------|--------------------------------------|--|--------------|
| • | Abandoned Location | <div>HARVEY E. YATES COMPANY</div> <div>YOUNG DEEP UNIT</div> <div>T-18-S, R-32-E, LEA COUNTY, NM</div> <div>Roads</div> | |
| ◇ | Dry and Abandoned | | |
| ✱ | Gas Well | | |
| ○ | Location - Active or Proposed | | |
| • | Oil Well | | |
| ✱ | Plugged and Abandoned Oil Well | | |
| ✱ | Oil Well converted to water injector | | |
| ✱ | Oil Well Workover | | |
| ✱ | Gas Well Plugged and Abandoned | | |
| ✱ | Injector - Plugged | | |
| Suzi Yahney | | 1" = 2,000 ft. | 3/14/2014 |
| YDU_YDROADS | | Scale 1:24000. | YDU_POD3.gpf |



Scale 1:24000.



LEGEND

- Abandoned Location
- ◊ Dry and Abandoned
- * Gas Well
- ◊ Location - Active or Proposed
- Oil Well
- Plugged and Abandoned Oil Well
- ✂ Oil Well converted to water injector
- ④ Oil Well Workover
- ✂ Gas Well Plugged and Abandoned
- ✂ Injector - Plugged

HARVEY E. YATES COMPANY

YOUNG DEEP UNIT
T-18-S, R-32-E, LEA COUNTY, NM
Pipelines and Flowlines

Suzi Yahney

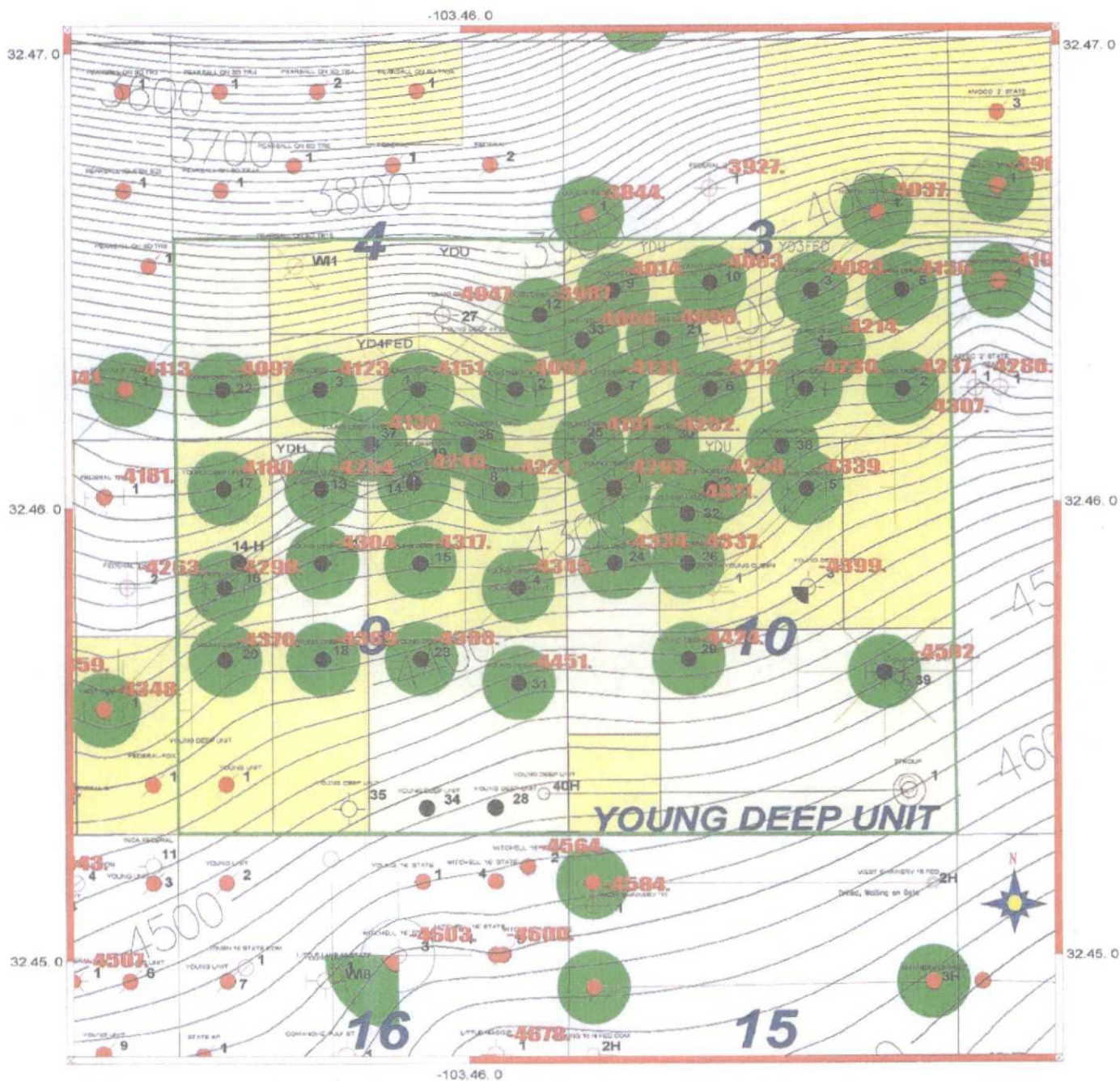
 $1'' = 2,000 \text{ ft.}$

3/14/2014

YDU YDUPIPE

Scale 1:24000.

YDU_POD4.gpf



LEGEND

- Abandoned Location
- ◊ Dry and Abandoned
- * Gas Well
- Location - Active or Proposed
- Oil Well
- # Plugged and Abandoned Oil Well
- ⌘ Oil Well converted to water injector
- ⌘ Oil Well Workover
- ⌘ Gas Well Plugged and Abandoned
- ⌘ Injector - Plugged

HARVEY E. YATES COMPANY

YOUNG DEEP UNIT T-18-S, R-32-E - LEA COUNTY, NM T/BONE SPRING "B" CARBONATE

CI = 20 FT.

1" = 2,000 ft.

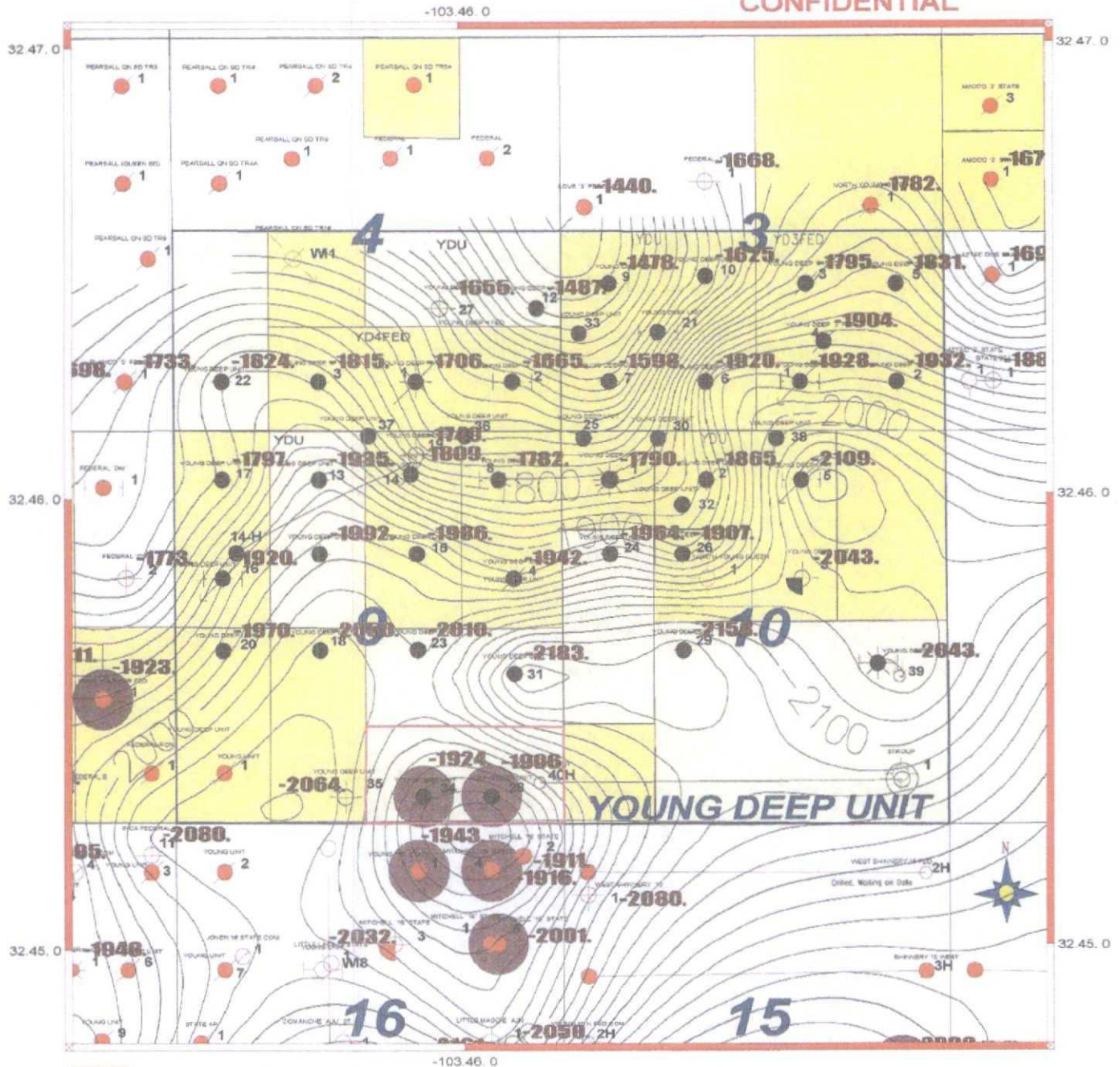
3/14/2014

YDU_BSPG

Scale 1:24000.

YDU_POD6.gpf

CONFIDENTIAL



LEGEND

- Abandoned Location
- ◊ Dry and Abandoned
- * Gas Well
- Location - Active or Proposed
- Oil Well
- Plugged and Abandoned Oil Well
- Oil Well converted to water injector
- Oil Well Workover
- Gas Well Plugged and Abandoned
- Injector - Plugged

HARVEY E. YATES COMPANY

YOUNG DEEP UNIT T-18-S, R-32-E - LEA COUNTY, NM T/U. BRUSHY CANYON DLWR MARKER

C I = 20 FT.

1" = 2,000 ft.

3/14/2014

YDU_DLWR

Scale 1:24000.

YDU_POD5.gpf

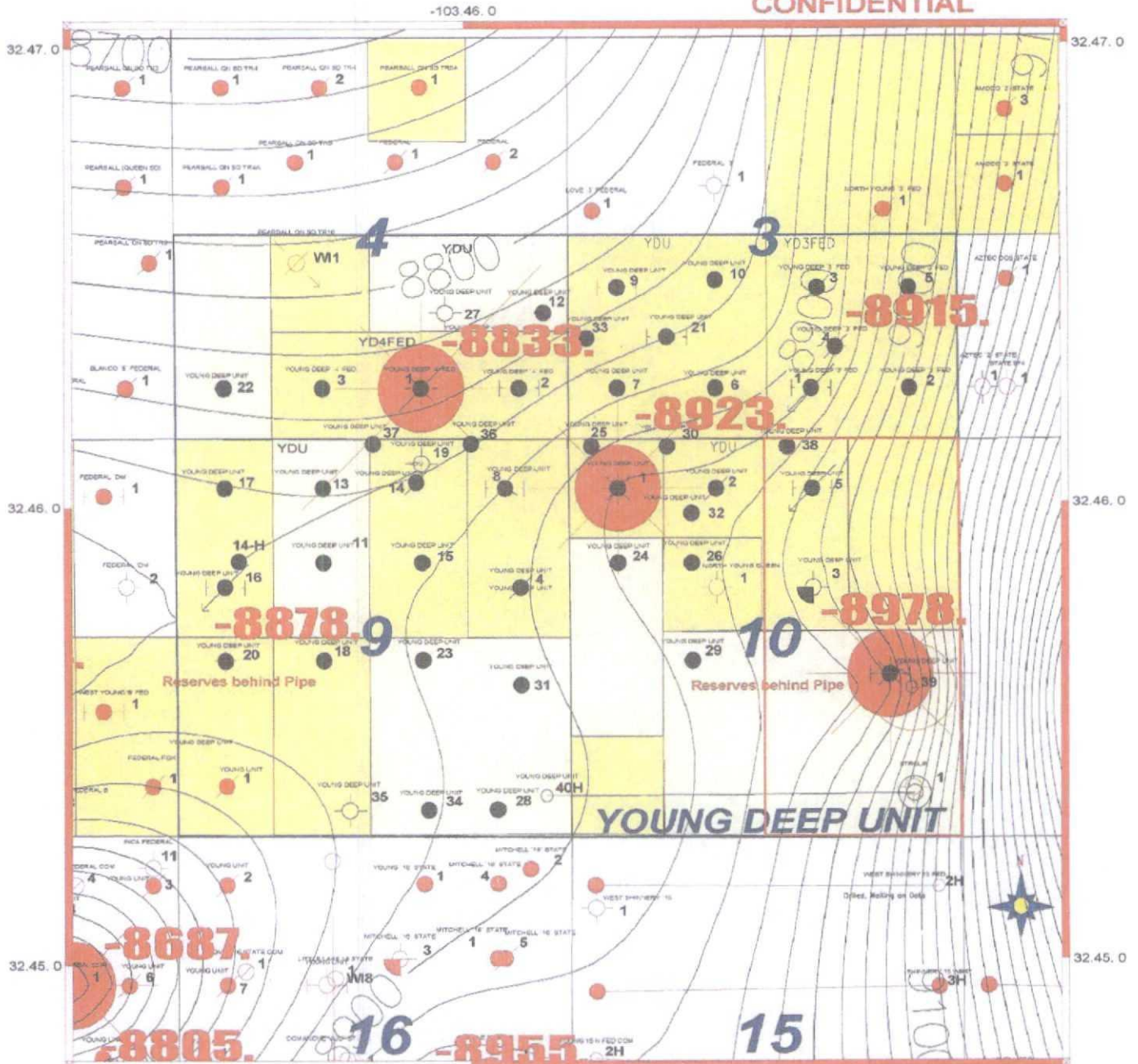
-103.46, 0



YDU_POD7.qpf

- Abandoned Location
- ◇ Dry and Abandoned
- * Gas Well
- Location - Active or Proposed
- Oil Well
- ✕ Plugged and Abandoned Oil Well
- ◊ Oil Well converted to water injector
- Oil Well Workover
- ✕ Gas Well Plugged and Abandoned
- ◊ Injector - Plugged

CONFIDENTIAL



Scale 1:24000.



LEGEND

- Abandoned Location
- ◊ Dry and Abandoned
- * Gas Well
- ◊ Location - Active or Proposed
- Oil Well
- ✱ Plugged and Abandoned Oil Well
- ✱ Oil Well converted to water injector
- ✱ Oil Well Workover
- ✱ Gas Well Plugged and Abandoned
- ✱ Injector - Plugged

HARVEY E. YATES COMPANY

YOUNG DEEP UNIT
T-18-S, R-32-E - LEA COUNTY, NM
STRUCTURE T/ LOWER MORROW

C I = 20 FT.

1" = 2,000 ft.

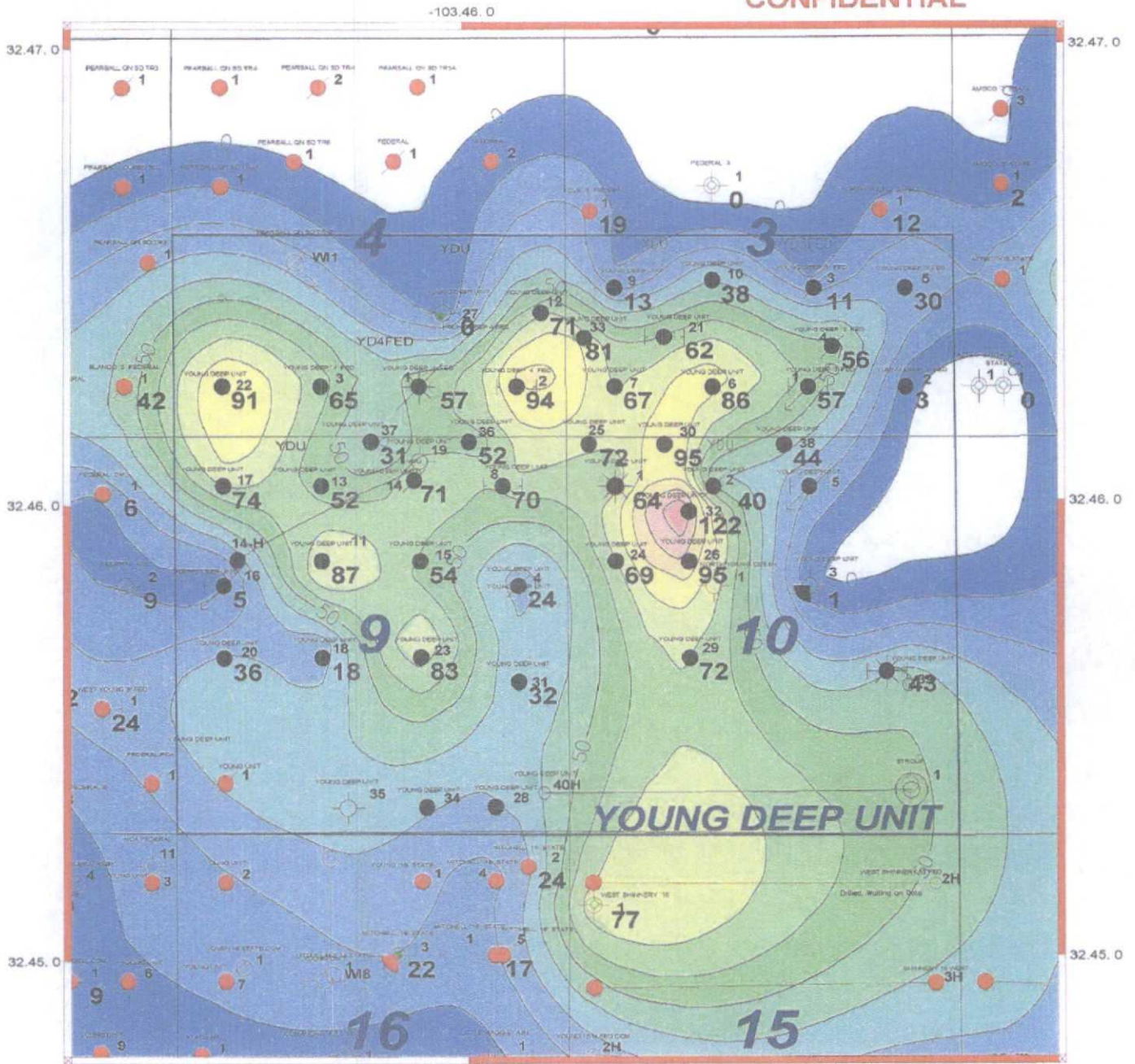
3/14/2014

YDU_MRRWL

Scale 1:24000.

YDU_POD8.gpf

CONFIDENTIAL



Scale 1:24000



LEGEND

- Abandoned Location
- ◊ Dry and Abandoned
- * Gas Well
- Location - Active or Proposed
- Oil Well
- Plugged and Abandoned Oil Well
- ◊ Oil Well converted to water injector
- Oil Well Workover
- Gas Well Plugged and Abandoned
- ◊ Injector - Plugged

HARVEY E YATES COMPANY

YOUNG DEEP UNIT
T-18-S, R-32-E, LEA COUNTY, NM
Bone Spring 2nd Sd Pay - Porosity >10%

CI = 10 FT.

1" = 2,000 ft.

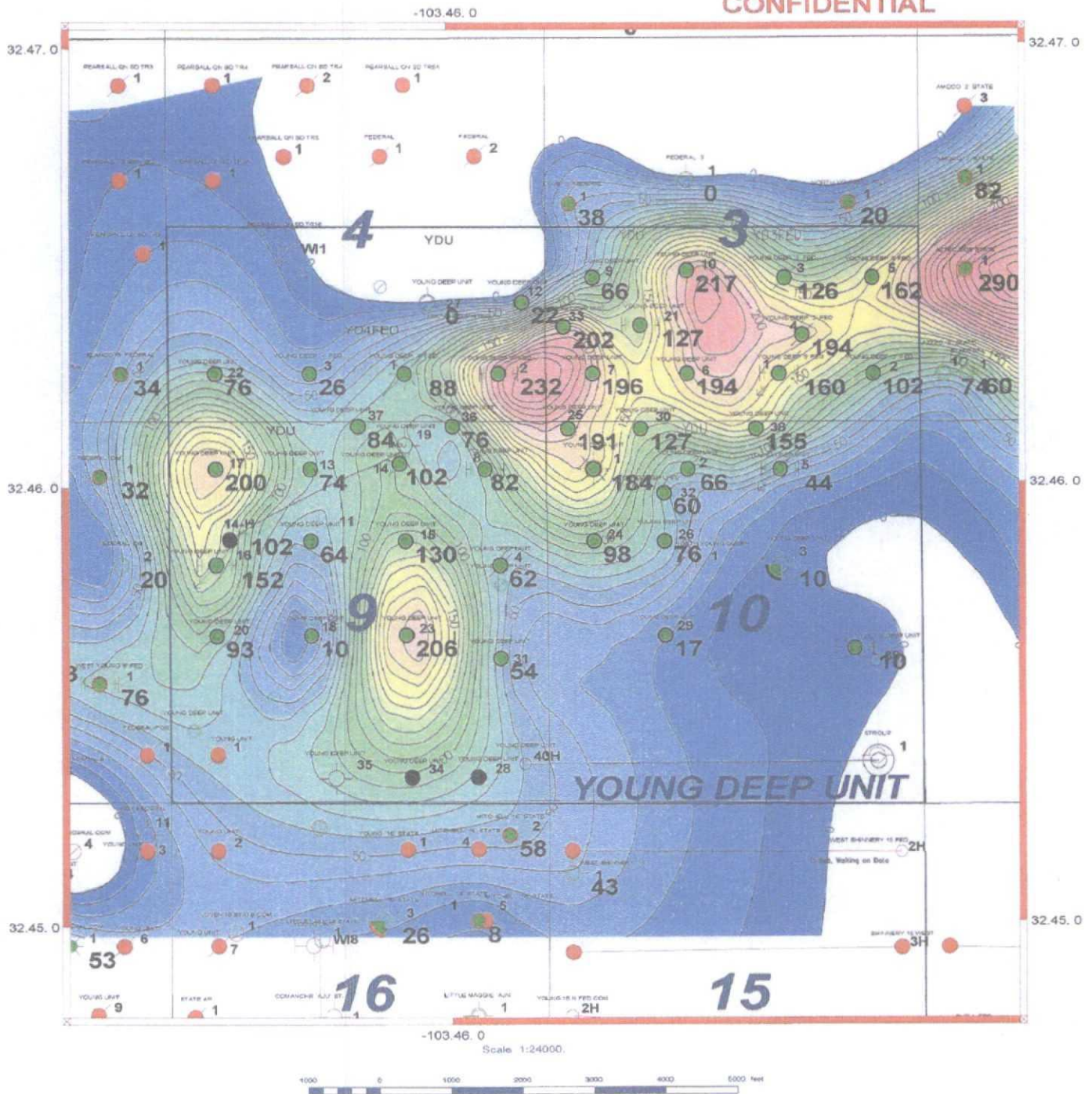
3/14/2014

YDU_BSPG2C

Scale 1:24000

YDU_POD0.gpf

CONFIDENTIAL



LEGEND

- Abandoned Location
- ◊ Dry and Abandoned
- * Gas Well
- Location - Active or Proposed
- Oil Well
- Plugged and Abandoned Oil Well
- ◊ Oil Well converted to water injector
- Oil Well Workover
- ✕ Gas Well Plugged and Abandoned
- ◊ Injector - Plugged

HARVEY E. YATES COMPANY

YOUNG DEEP UNIT
T-18-S, R-32-E, LEA COUNTY, NM
Bone Spring "B" Carbonate Porosity >6%

C I = 10 FT

1" = 2,000 ft.

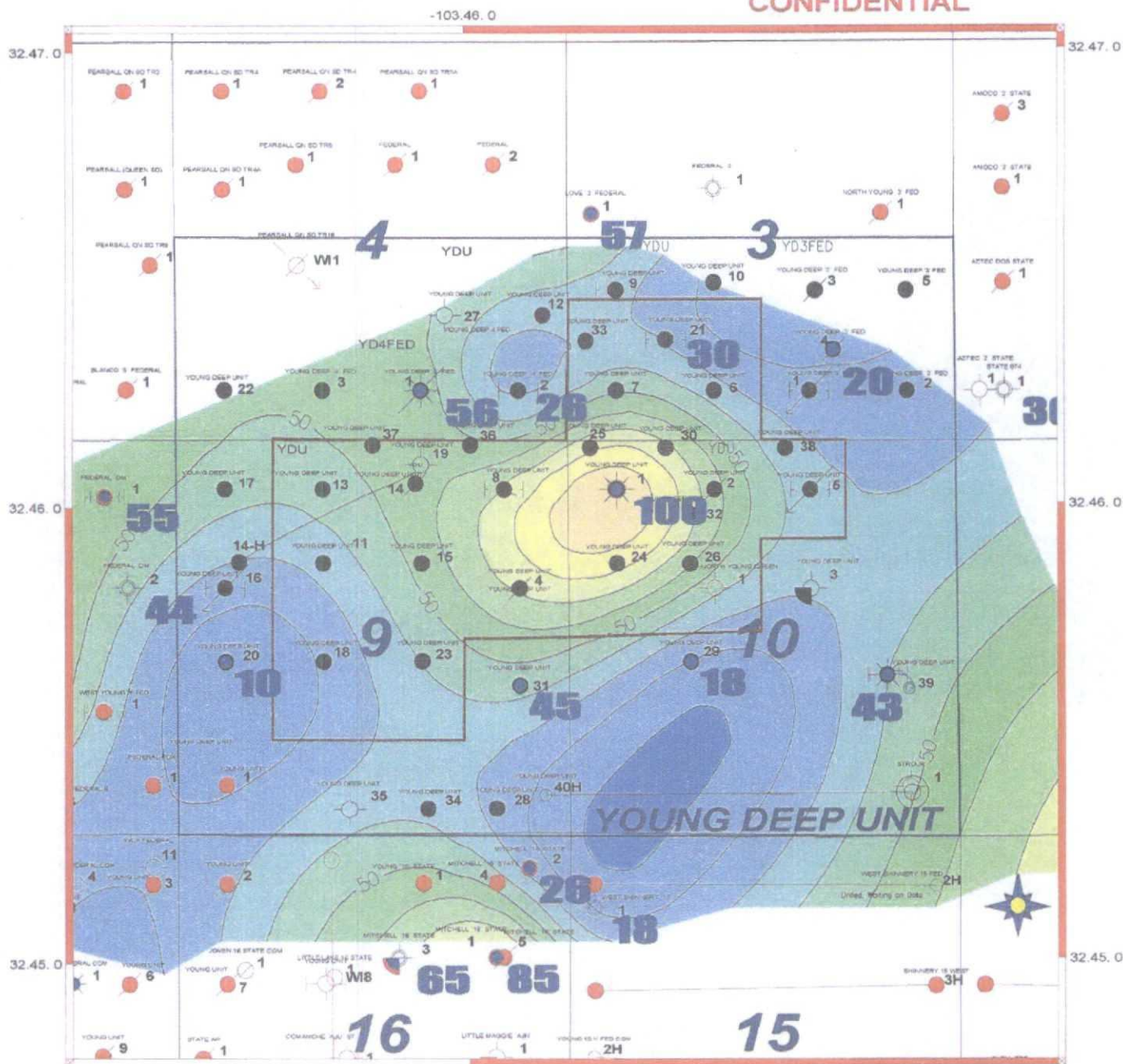
3/14/2014

YDU_BSPGB

Scale 1:24000.

YDU_POD9.gpf

CONFIDENTIAL



WOLFCAMP PARTICIPATING AREA

Scale 1:24000.



LEGEND

- Abandoned Location
- Dry and Abandoned
- Gas Well
- Location - Active or Proposed
- Oil Well
- Plugged and Abandoned Oil Well
- Oil Well converted to water injector
- Oil Well Workover
- Gas Well Plugged and Abandoned
- Injector - Plugged

HARVEY E. YATES COMPANY

YOUNG DEEP UNIT
T-18-S, R-32-E - LEA COUNTY, NM
GROSS ISOPACH LOWER WOLFCAMP PAY

C I = 10 FT.

1" = 2,000 ft.

3/14/2014

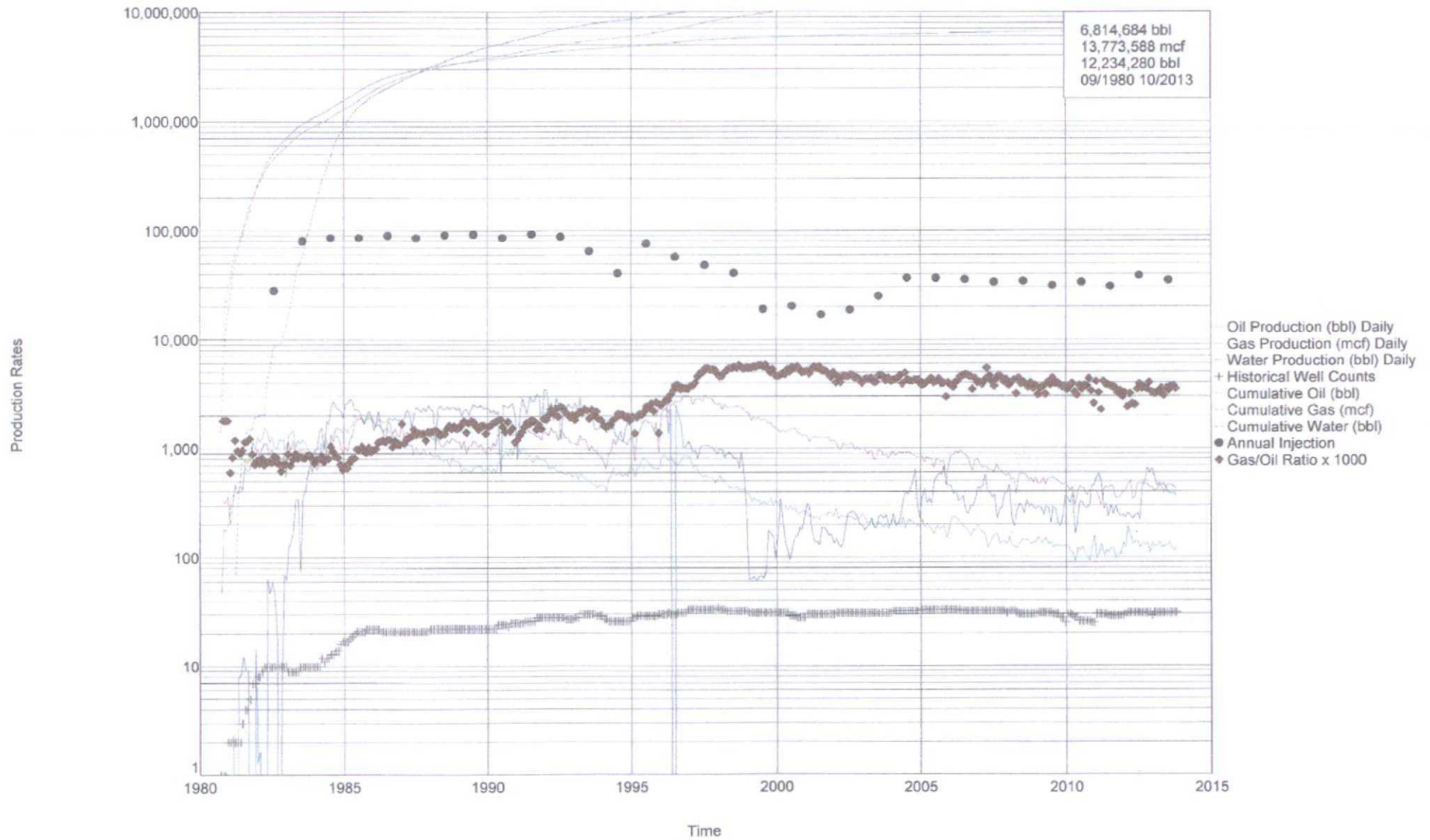
YDU_WFMFAF

Scale 1:24000.

YDU_POD1.gpf

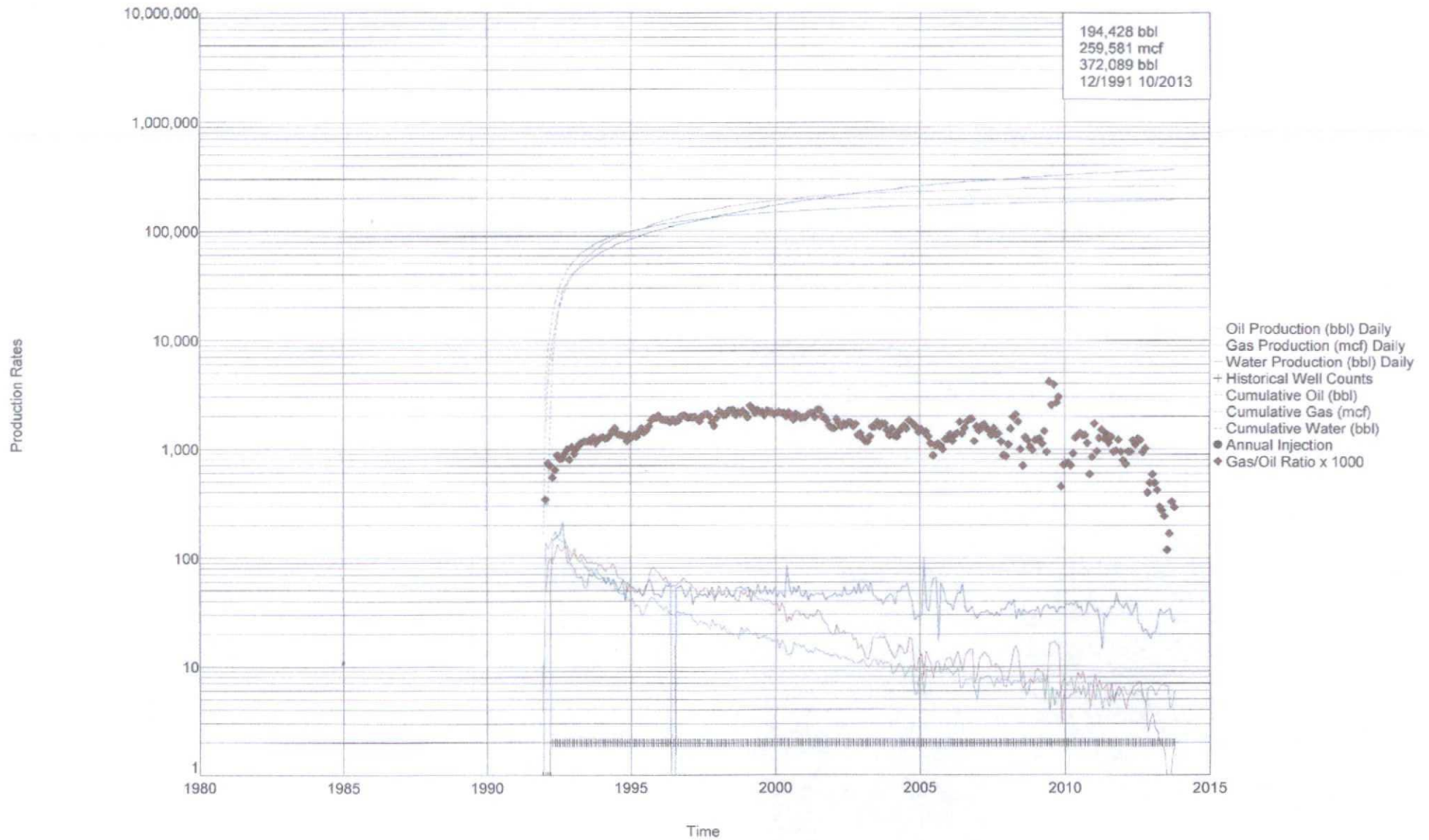
Lease Name: MULTIPLE
 County, State: LEA, NM
 Operator: MULTIPLE
 Field: YOUNG NORTH
 Reservoir: BONE SPRING
 Location:

HARVEY E. YATES COMPANY YOUNG NORTH BONE SPRING



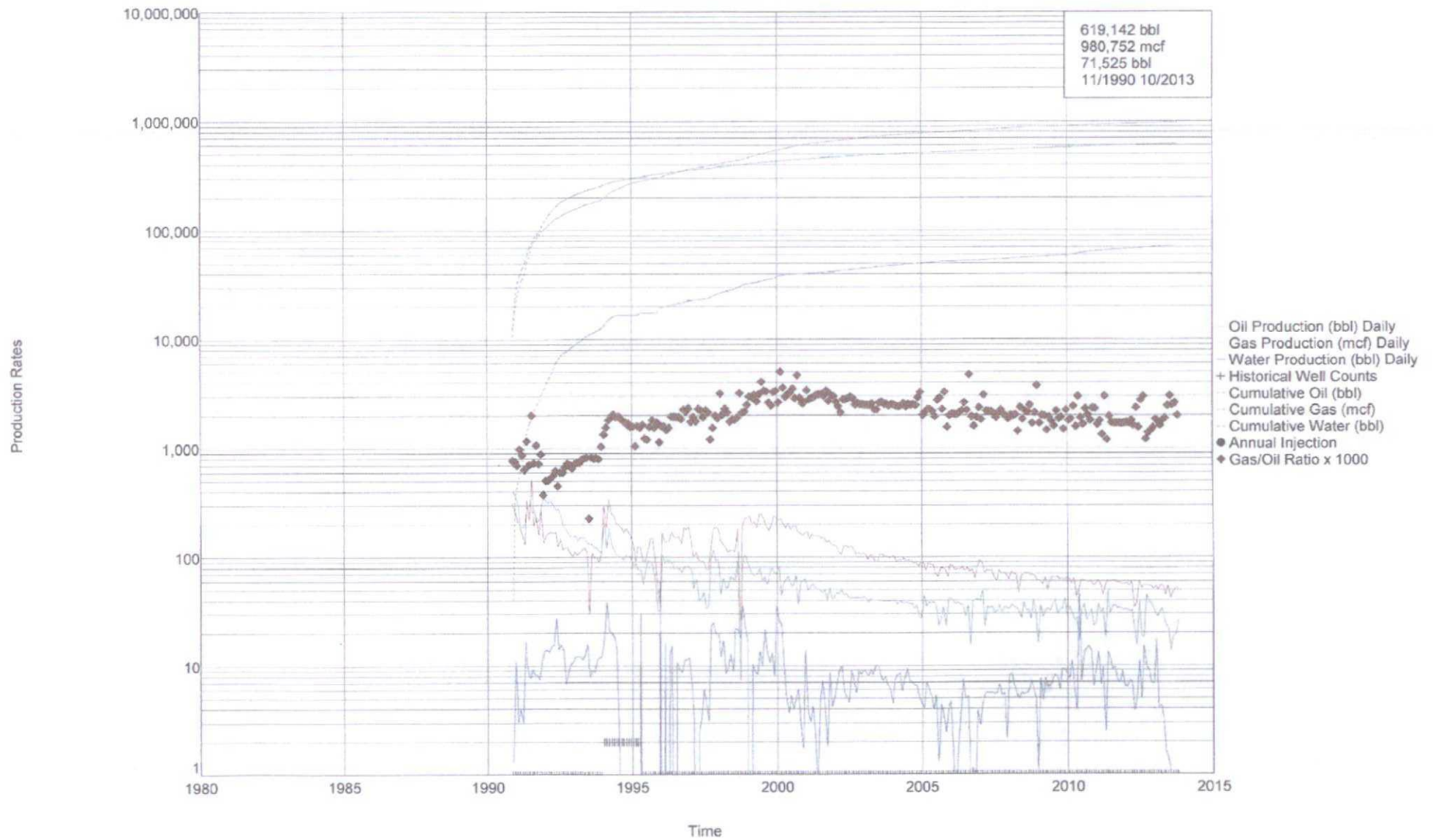
Lease Name: YOUNG DEEP UNIT
County, State: LEA, NM
Operator: NADEL & GUSSMAN HEYCO LLC
Field: YOUNG NORTH
Reservoir: DELAWARE
Location:

HARVEY E. YATES COMPANY YOUNG NORTH DELAWARE



Lease Name: MULTIPLE
County, State: LEA, NM
Operator: MULTIPLE
Field: YOUNG
Reservoir: WOLFCAMP
Location:

HARVEY E. YATES COMPANY YOUNG WOLFCAMP



Lease Name: MULTIPLE
County, State: LEA, NM
Operator: MULTIPLE
Field: YOUNG
Reservoir: MORROW
Location:

HARVEY E. YATES COMPANY YOUNG MORROW

