

APPLICATION TO UNITIZE

Etz State Unit
Sections 16 and 17, T17S-R30E
Eddy County, New Mexico

Geologic Exhibits

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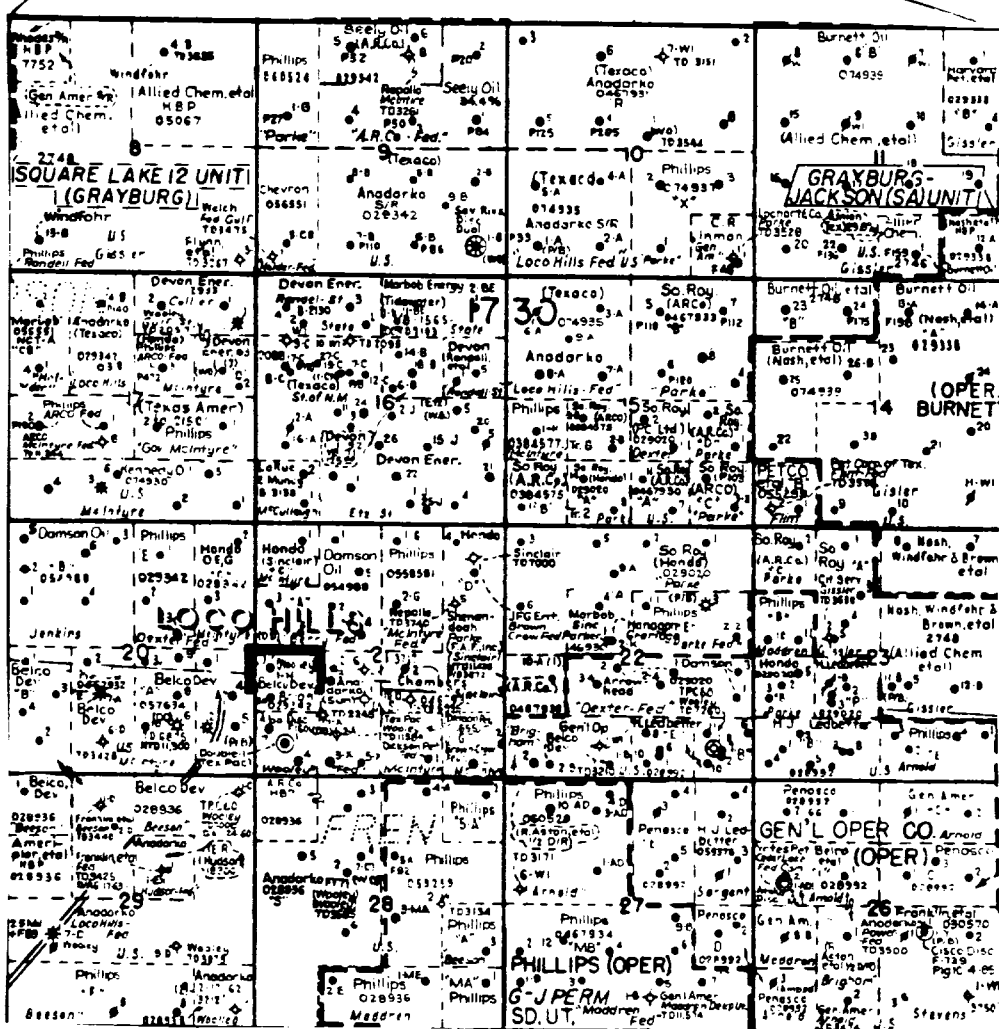
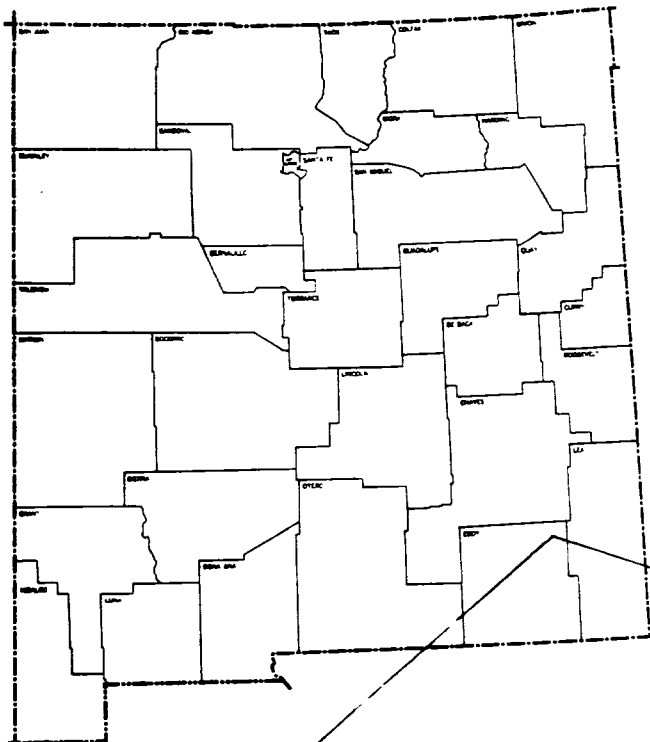
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GEOLOGIC SUMMARY FOR THE ETZ STATE UNIT

The Devon Energy Corporation proposed Etz-State Unit Grayburg waterflood includes all or parts of Sections 16 and 17 of Township 17 South, Range 30 East of Eddy County, New Mexico. This property lies on the structural axis of an easterly plunging anticline which defines the Grayburg-Jackson oil field. The field was discovered in March of 1929 and has established production from the Seven Rivers, Queen, Grayburg and San Andres Formations.

The formation of interest here is the Grayburg which consists of several lenses of porous, dolomitic sand occurring throughout 300 feet of massive dolomite found in the depth interval of 2500 feet to 2800 feet. Examination of geophysical logs in the local area indicates good lateral continuity of these porous intervals across the proposed Etz-State Unit. Core analyses in the immediate area are not available. Core observations of the porous zones within the Grayburg elsewhere in the Grayburg-Jackson field describe it as a tan, medium-grained, friable sand, sucrosic in portions with fair to good oil stain throughout and having fair to good intergranular porosity throughout. The sand appears well sorted and contains occasional thin stringers of tight anhydritic sand.

At the Etz-State Unit specifically there are five distinct porosity intervals identifiable on geophysical logs; the Loco Hills, the Upper, Middle and Lower Metex and the Premier. Assuming a sandy dolomite lithology, the porosity averages 14.5% for the three primary producing Grayburg zones; the Loco Hills, the Middle Metex and the Premier. The sandy intervals are believed to be lenticular with a permeability pinch out occurring laterally and bearing a solution gas drive as the reservoir mechanism.



LOCATION PLAT

No. 23

		BHC <i>of consulting.</i>	
FILE NO. _____		COMPANY <u>TEXAS AMERICAN OIL CORPORATION</u>	
WELL <u>512 STATE NO. 23</u>		FIELD <u>GRAYBOND JACKSON</u>	
COUNTY _____		EDDY _____ STATE <u>NEW MEXICO</u>	
LOCATION: <u>990' FSU & 1650' FVL</u>		Other Formers _____	
ME _____ 16 _____ TWO _____ 17-5 _____ NOSE _____ 30-E _____		_____	
Measurement Details: 1. on Measurement Form _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ 12. _____ 13. _____ 14. _____ 15. _____ 16. _____ 17. _____ 18. _____ 19. _____ 20. _____ 21. _____ 22. _____ 23. _____ 24. _____ 25. _____ 26. _____ 27. _____ 28. _____ 29. _____ 30. _____ 31. _____ 32. _____ 33. _____ 34. _____ 35. _____ 36. _____ 37. _____ 38. _____ 39. _____ 40. _____ 41. _____ 42. _____ 43. _____ 44. _____ 45. _____ 46. _____ 47. _____ 48. _____ 49. _____ 50. _____ 51. _____ 52. _____ 53. _____ 54. _____ 55. _____ 56. _____ 57. _____ 58. _____ 59. _____ 60. _____ 61. _____ 62. _____ 63. _____ 64. _____ 65. _____ 66. _____ 67. _____ 68. _____ 69. _____ 70. _____ 71. _____ 72. _____ 73. _____ 74. _____ 75. _____ 76. _____ 77. _____ 78. _____ 79. _____ 80. _____ 81. _____ 82. _____ 83. _____ 84. _____ 85. _____ 86. _____ 87. _____ 88. _____ 89. _____ 90. _____ 91. _____ 92. _____ 93. _____ 94. _____ 95. _____ 96. _____ 97. _____ 98. _____ 99. _____ 100. _____		Date <u>3-6-57</u> No. <u>1577</u> by <u>K. B.</u> <u>16557</u>	
Client Name _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____ Phone _____ Telex _____ Cable _____ Fax _____ E-mail _____ Website _____ Other _____ Notes _____ Date _____ By _____ Title _____ Company _____ Address _____			

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