

ABOVE THIS LINE FOR DIVISION USE ONLY

# NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



## ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

### Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [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-Quantified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

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

[A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [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

[D] Other: Specify \_\_\_\_\_

### [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] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name

Signature

KELLAHIN & KELLAHIN

Attorneys At Law

P.O. Box 2265

Santa Fe, NM 87504-2265

Date

8/4/05

2005 AUG 4 PM 1:03

**KELLAHIN & KELLAHIN**  
**Attorney at Law**

**W. Thomas Kellahin**  
Recognized Specialist in the Area of  
Natural Resources-oil and gas law-  
New Mexico Board of Legal Specialization

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Santa Fe, New Mexico 87501

Telephone 505-982-4285  
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kellahin@earthlink.net

August 4, 2005

**HAND DELIVERED**

Mr. Michael E. Stogner, P.E.  
Oil Conservation Division  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

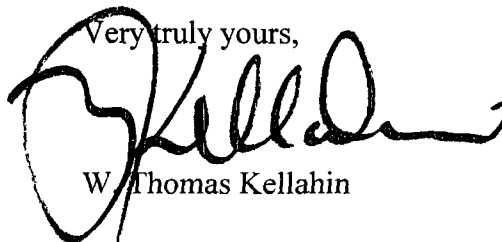
Re: Administrative Application of Apache Corporation  
for approval of two unorthodox oil well locations  
and simultaneous dedications, Lea County, New Mexico

- (1) Wellbore: State Land "15" Well No. 9  
Location: 910 feet FSL and 1330 feet FEL (Unit O)  
Section 16, T21S, R37E
- (2) Wellbore: State Land "15" Well No. 10  
Location: 330 feet FSL and 1330 feet FEL (Unit O)  
Section 16, T21S, R37E

Dear Mr. Stogner:

On behalf of Apache Corporation, please find enclosed our referenced  
administrative application.

Very truly yours,



W. Thomas Kellahin

cc: Apache Corporation  
Attn: Bob Curtis

2005 AUG 4 PM 1 03

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE ADMINISTRATIVE APPLICATION  
OF APACHE CORPORATION FOR TWO UNORTHODOX OIL  
WELL LOCATIONS AND SIMULTANEOUS DEDICATIONS,  
LEA COUNTY, NEW MEXICO.**

**ADMINISTRATIVE APPLICATION**

APACHE CORPORATION ("Apache") by its attorneys, Kellahin & Kellahin, seeks an order authorizing the drilling and production of its:

(1) State Land "15" Well No. 9 at an unorthodox oil well location 910 feet FSL and 1330 feet FEL (Unit O) Section 16, T21S, R237E, Lea County New Mexico; and

(2) State Land "15" Well No. 10 at an unorthodox oil well location 330 feet FSL and 2610 feet FEL (Unit O) Section 16, T21S, R237E, Lea County New Mexico in the following manner:

(1) Apache seeks exceptions to:

(a) the Special Rules and Regulations of the Blinbry Oil and Gas Pool, as promulgated by Division Order R-8170-P;

(b) the Special Rules and Regulations of the Tubb Oil and Gas Pool, as promulgated by Division Order R-8170, as amended;

(c) Division Rule 104.B (1), revised by Division Order R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 11, 1992

(2) for production from the following pools:

- (a) Blinebry Oil and Gas Pool (6660)
- (b) Tubb Oil and Gas Pool (60240)
- (c) Drinkard Pool (19190)
- (d) Wantz-Abo Pool (62700)

(3) This 40-acre oil spacing and proration unit is currently dedicated to:

- (a) John H. Hendrix Corporation's  
State Land "15" Well No. 3 (API # 30-025-06632)  
660 feet FSL & 1980 Feet FEL (Unit 0)  
Dual Completion in the Blinebry and Drinkard;  
Currently only Blinebry production reported

- (b) John H. Hendrix Corporation's  
State Land "15" Well No. 6 (API # 30-025-20311)  
~~2300~~ 230 feet FSL & 1650 Feet FEL (Unit 0)  
Dual Completion in the Abo and Drinkard;  
Currently only Drinkard production reported

(4) Apache requests authority to simultaneously dedication the subject wellbores with the appropriate existing wellbores listed in paragraph 3 above.

(5) In support of this application, Apache submitted the following:

- (a) C-102 for the State Land "15" Well No. 9 attached as Exhibit 1-A
- (b) C-102 for the State Land "15" Well No. 10 attached as Exhibit 1-B
- (c) A written report prepared by Bob Curtis, a geologist with Apache, attached as Exhibit 1-C for the State Land "15" Well No. 9 and for the State Land "15" Well No. 10;
- (d) Exhibit 2--Locator map
- (e) Exhibit 3--Blinebry Gas Cap display
- (f) Exhibit 4--Blinebry Oil Leg display

(g) Exhibit 5--Tubb display

(h) Exhibit 6--Drinkard display

### JUSTIFICATION

(6) Approval of the proposed unorthodox oil well location should enable Apache to further develop and deplete the Blinbry, Tubb, Drinkard and Abo intervals within this State of New Mexico oil & gas lease that might not otherwise be recovered.

### NOTIFICATION AND WAIVERS

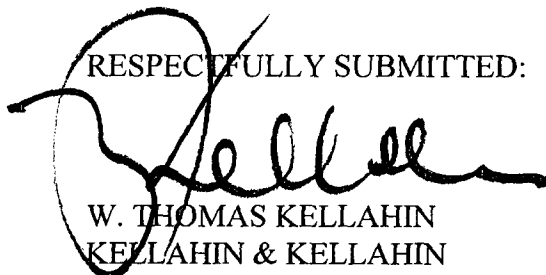
(7) The subject 40-acre spacing unit and the offsetting 40-acre spacing units towards which this wellbore encroached are within a common single State of New Mexico oil & gas lease (B-8105-3, dated April 10, 1939)

(8) Because all working interest and revenue interest owners are common with the same percentages in the S/2 of Section 16 no further notice is required. See OCD Rule 1207.A (2)

(9) Apache has negotiated a voluntary agreement with Hendrix the operator of the two wells towards which the subject wells encroach that provides that Apache will drill and complete these wells and then turn them over to Hendrix to produce. See Exhibit 1-C at page 7

**WHEREFORE**, Apache, as applicant, requests that the Division enter its order approving these requested unorthodox well locations and simultaneous dedications.

RESPECTFULLY SUBMITTED:



W. THOMAS KELLAHIN  
KELLAHIN & KELLAHIN

P. O. Box 2265

Santa Fe, New Mexico 87504

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Fax: (505) 982-2047

e-mail [kellahin@earthlink.net](mailto:kellahin@earthlink.net)

EXHIBIT

1-A

## DISTRICT I

1020 N. FRANCIS DR., SHELBY, NM 87160

## DISTRICT II

1300 W. GRAND AVENUE, ALBUQUERQUE, NM 87102

## DISTRICT III

1000 E. BRANSON RD., ALBUQUERQUE, NM 87110

## DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

## State of New Mexico

Energy, Minerals and Natural Resources Department

## OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102

Revised JUNE 18, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name STATE LAND 15	Well Number 9
OGED No.	Operator Name APACHE CORPORATION	Elevation 3444'

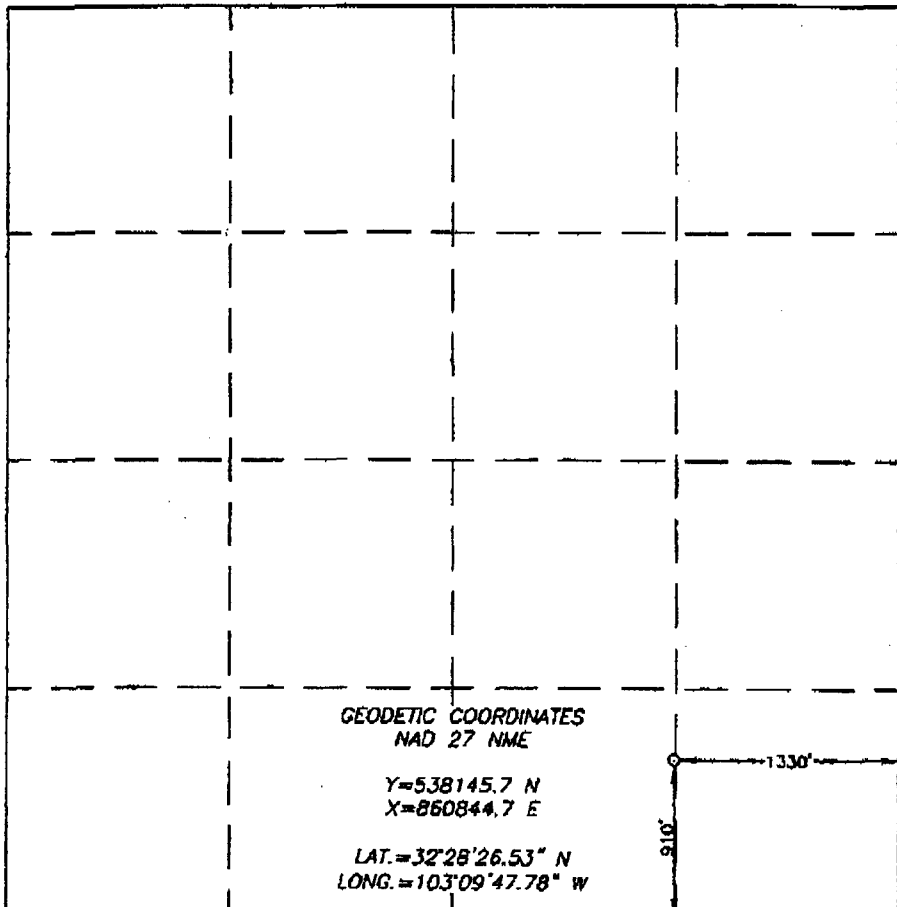
## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	16	21-S	37-E		910	SOUTH	1330	EAST	LEA

## 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	Joint or InHH	Consolidation Code	Order No.						

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

	<b>OPERATOR CERTIFICATION</b>  I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature _____  Printed Name _____  Title _____  Date _____
	<b>SURVEYOR CERTIFICATION</b>  I hereby certify that the well location shown on this plat was located in the field under my supervision and that the same is true and correct to the best of my knowledge and belief.  Date Surveyed _____ Signature & Seal of Professional Surveyor _____  Certificate No. GARY EDDSON 12041
	<b>GEODETTIC COORDINATES</b> NAD 27 NME  Y=538145.7 N X=860844.7 E  LAT.=32°28'26.53" N LONG.=103°09'47.78" W
	<b>DATE</b> JUNE 24, 2005  7/5/05 05.11.0978

EXHIBIT

1-B

## DISTRICT I

1025 N. FRANKLIN BL., HOUSTON, NM 88240

## DISTRICT II

1301 W. GRAND AVENUE, ALBUQUERQUE, NM 87102

## DISTRICT III

1000 Rio Grande Rd., Artesa, NM 87410

## DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

## State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 5 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

C AMENDED REPORT

API Number		Pool Code	Pool Name
Property Code	Property Name STATE LAND 15		Well Number 10
GRID No.	Operator Name APACHE CORPORATION		Elevation 3447'

## Surface Location

UL or Lot No.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
0	16	21-S	37-E		330	SOUTH	2610	EAST	LEA

## Bottom Hole Location if Different From Surface

UL or Lot No.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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</p> <p>Y=537553.3 N X=859571.8 E</p> <p>LAT.=32°28'20.80" N LONG.=103°10'02.71" W</p>				<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature _____</p> <p>Printed Name _____</p> <p>Title _____</p> <p>Date _____</p>	
				<p><b>SURVEYOR CERTIFICATION</b></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>JUNE 24, 2005</p> <p>Date Surveyed _____</p> <p>Signature &amp; Seal _____</p> <p>Professional Surveyor</p> <p>NEW MEXICO</p> <p>7/5/05</p> <p>05.17.09750</p> <p>Certificate No. GARY EDDY 12841</p>	
				<p>2610'</p>	
				<p>330'</p>	

Application of Apache Corporation for administrative  
approval of unorthodox well locations:

State Land 15 #9-- 910' FSL & 1330' FEL  
State Lands 15 #10—330' FSL & 2610' FEL  
Section 16, Township 21 South, Range 37 East, NMPM  
Lea County, New Mexico

PRIMARY OBJECTIVES: Blinebry, Tubb, and Drinkard  
SECONDARY OBJECTIVE: Abo

1. Apache Corporation (Apache) is the operator of the proposed **State Land 15 #9** well (See C-102 attached as **Exhibit 1-A**). This proposed unorthodox location is offset by the following wells that are, or have been productive from various reservoirs that will be penetrated. (**Exhibit 2**)

OPER	WELL	LOC	RESERVOIR	CUM O/G/W	DAILY O/G/W	POOL
Apache	State DA #5	16-I	BLBY	37/114/2	0/0/0	Blinebry Oil and Gas
Apache	State DA #5	16-I	GRG	4/25/31	0/0/0	Penrose Skelly Grayburg
Apache	State DA #5	16-I	PDDK	1/4/27	9/38/225	Paddock
Apache	State DA #5	16-I	ABO	5/0/0	0/0/0	Wantz Abo
Apache	State DA #4	16-I	BLBY	16/2219/0	0/6/0	Blinebry Oil and Gas
Apache	State DA #4	16-I	DRKD	159/2306/1	0/6/0	Drinkard
Apache	State DA #10	16-J	GRBG	3/34/12	31/120/104	Penrose Skelly Grayburg
Apache	State DA #3	16-J	BLBY	16/455/10	4/98/2	Blinebry Oil and Gas
Apache	State DA #3	16-J	TUBB	34/3592/0	0/0/0	Tubb Oil and Gas
Apache	State DA #3	16-J	DRKD	137/1776/1	0/0/0	Drinkard
Apache	State DA #8	16-J	GRBG	10/96/72	5/53/26	Penrose Skelly Grayburg
John H Hendrix	State Land 15 #5	16-P	BLBY	247/2383/40	9/65/0	Blinebry Oil and Gas
John H Hendrix	State Land 15 #5	16-P	ABO	53/60/22	0/0/0	Wantz Abo
John H Hendrix	State Land 15 #4	16-P	DRKD	218/2007/59	4/115/0	Drinkard
John H Hendrix	State Land 15 #4	16-P	TUBB	22/6454/3	0/79/0	Tubb Oil and Gas
John H Hendrix	State Land 15 #6	16-O	DRKD	73/2284/31	4/180/0	Drinkard
John H Hendrix	State Land 15 #6	16-O	ABO	67/168/39	0/0/0	Wantz Abo
John H Hendrix	State Land 15 #3	16-O	BLBY	259/4082	3/43/0	Blinebry Oil and Gas
John H Hendrix	State Land 15 #3	16-O	DRKD	152/8/0	0/0/0	Drinkard

EXHIBIT

1-C



2. Apache Corporation (Apache) is the operator of the proposed **State Land 15 #10** well (See C-102 attached as **Exhibit 1-B**). This proposed unorthodox location is offset by the following wells that are, or have been productive from various reservoirs. (**Exhibit 2**)

OPER	WELL	LOC	RESERVOIR	CUM O/G/W	DAILY O/G/W	POOL
John H Hendrix	State Land 15 #6	16-O	DRKD	73/2284/31	4/180/0	Drinkard
John H Hendrix	State Land 15 #6	16-O	ABO	67/168/39	0/0/0	Wantz Abo
John H Hendrix	State Land 15 #3	16-O	BLBY	259/4082	3/43/0	Blinebry Oil and Gas
John H Hendrix	State Land 15 #3	16-O	DRKD	152/8/0	0/0/0	Drinkard
John H Hendrix	State Land 15 #2	16-N	BLBY	60/1863/37	0/0/0	Blinebry Oil and Gas
John H Hendrix	State Land 15 #2	16-N	DRKD	181/1575/16	0/0/0	Drinkard
John H Hendrix	State Land 15 #2	16-N	GRBG	1/19/13	10/166/113	Penrose Skelly Grayburg
John H Hendrix	Weatherly 21 #2	21-B	FSLM	21/16/20	6/12/40	Wantz Fusselman
Stephens & Johnson	Weatherly #4	21-B	BLBY	106/1124/43	7/110/3	Blinebry Oil and Gas
Stephens & Johnson	Weatherly #4	21-B	DRKD	230/2062/8	1/27/0	Drinkard
John H Hendrix	Weatherly 21 #5	21-C	GRBG	2/14/4	6/35/12	Penrose Skelly Grayburg
Stephens & Johnson	Weatherly #3	21-C	BLBY	74/4327/38	5/109/3	Blinebry Oil and Gas
Stephens & Johnson	Weatherly #3	21-C	DRKD	173/1770/4	0/8/0	Drinkard

3. The proposed **State Land 15 #9** unorthodox location of 910' from south line and 1330' from east line and the **State Land 15 #10** unorthodox location 330' from the south line and 2610' from the east line of this section are predicated by geological, location, and drainage considerations:

**a. Geology**

The Blinebry, Tubb, and Drinkard Formations are members of the Yeso Group, Permian Leonardian in age. Fluid contacts, specifically Blinebry GOC at -2255 and Drinkard OWC at -3225, employed by Shell in the

unitization hearing for the NorthEast Drinkard Unit, just to the east, have been used here. Production from the three reservoirs is assigned to individual Blinebry Oil and Gas, Tubb Oil and Gas, and Drinkard Pools but downhole commingling is pre-approved pending submission of allocations to the Hobbs District Office.

All three formations are shallow marine carbonates, consisting primarily of dolomite. The Tubb has appreciable clastic content and the Drinkard becomes limey toward its base. Anhydrite can occur throughout the interval. Pay zones are thin, erratically distributed, and separated by thick impermeable intervals. Porosity and permeability are low. Wells are not generally capable of draining a full 40-Acre Spacing Unit. In fact, Apache's calculations indicate drainage area usually approximates 20 Acres.

Structure is significant in that it controls the fluid distribution and amount of pay above and below the Blinebry gas-oil contact and above the Drinkard oil-water contact.

Apache approached its evaluation by mapping log derived SoPhiH for each of four major reservoirs: Blinebry Gas Cap, Blinebry Oil Leg, Tubb, and Drinkard. This analysis required modern neutron-density and resistivity logs for any well to be used. Many wells thus had to be excluded from analysis because of the vintage of downhole logs or lack of a full logging suite. Sufficient new well control exists near the proposed location to feel comfortable with this interpretation.

#### **1. Blinebry Gas Cap (Exhibit 3)**

Thickness of the Blinebry Gas Cap is partially related to the subsea top of the Blinebry. The higher the top, the thicker the gas cap can be. Using a 5% threshold, porosity averages 9.8% and water saturation averages 29.5% in 138 nearby wells selected for analysis. SoPhiH at this location is expected to be 2.8'.

#### **2. Blinebry Oil Leg (Exhibit 4)**

Thickness of the Blinebry Oil Leg is partially related to the subsea top of the Blinebry, the higher the top, the thinner the oil leg might be. Using a 5% threshold, porosity averages 8.5% and water saturation averages 31.6% in 171 nearby wells selected for analysis. SoPhiH at this location is expected to be 6.4'.

### **3. Tubb (Exhibit 5)**

The Tubb is generally considered to be a gas reservoir, although no gas-oil or gas-water contact has been suggested and oil completions are common. Two offsetting wells (State DA #3 and State Land 15 #4) are, or have, produced from the Tubb and both were classified as oil wells. The proposed **State Land 15 #9** is expected to be an oil well.

Using a 5% porosity threshold and a 50 APIU Gamma Ray threshold because of the greater amount of clastic material, porosity averages 8.0% and water saturation averages 31.1% in 208 nearby wells selected for analysis. SoPhiH at this location is expected to be 6.0'.

### **4. Drinkard (Exhibit 6)**

The thickness of the Drinkard pay is also related to its subsea position, the higher the top, the thicker the interval can be. Using a 5% threshold, porosity averages 9.1% and water saturation averages 25.6% in 191 nearby wells selected for analysis. SoPhiH at this location is expected to be 10.6'.

### **5. Abo**

The Abo is immediately sub adjacent to the Drinkard. This location is included in Wantz; Abo Pool. It is a secondary objective that will cost less than \$50,000 to drill and complete in this wellbore but it cannot be drilled as a primary target. Three wells (State DA #5, State Land 15 #5 and State Land 15 #6) have produced from the Abo, but are not currently producing.

### **6. Uphole Reservoirs**

If potentially commercial reservoirs are encountered in the Grayburg, San Andres, or Paddock a separate wellbore will be proposed to exploit those reservoirs.

#### **b. Location**

Apache's intent was to place the wells equidistant from the productive Blinbry, Tubb, and Drinkard wells in S/2SE/4, §16 to encounter an undrained reservoir volume.

**c. Drainage for State 15 #9:**

The proposed **State 15 #9** is approximately equidistant from the productive Blinebry, Tubb, and Drinkard wells in S/2SE/4, §16 and should encounter an undrained reservoir volume.

Reservoir engineering used the SoPhiH maps to estimate drainage of each offsetting well in each reservoir. Recoverable reserves for this location are calculated as the volume under a 20 a radius (less if the direct offsets were not capable of draining 20 A) with reduced reservoir pressure where drainage has occurred. Drainage offsetting this location is as follows:

SEC	LEASE NAME	WELL	PROD ZONE NAME	EUR			DRAINED ACRES
				OIL	WATER	GAS	
16	State DA #5	5	BLINEBRY GAS CAP	1030	785	103	7
16	State DA #5	4	BLINEBRY GAS CAP	21800	0	2180	90
16	State DA #5	3	BLINEBRY GAS CAP	8310	4993	831	40
16	State Land 15	5	BLINEBRY GAS CAP	9780	20074	978	39
16	State Land 15	4	BLINEBRY GAS CAP				
16	State Land 15	6	BLINEBRY GAS CAP				
16	State Land 15	3	BLINEBRY GAS CAP	26090	19725	2609	116
16	State DA #5	5	BLINEBRY OIL LEG	36338	785	11	7
16	State DA #5	4	BLINEBRY OIL LEG	0	0	12	1
16	State DA #5	3	BLINEBRY OIL LEG	34037	4993	228	9
16	State Land 15	5	BLINEBRY OIL LEG	260763	20074	1703	50
16	State Land 15	4	BLINEBRY OIL LEG				
16	State Land 15	6	BLINEBRY OIL LEG				
16	State Land 15	3	BLINEBRY OIL LEG	233251	19725	1473	54
16	State DA #5	5	TUBB				
16	State DA #5	4	TUBB				
16	State DA #5	3	TUBB	33803	0	3592	193
16	State Land 15	5	TUBB				
16	State Land 15	4	TUBB	22067	2666	6790	313
16	State Land 15	6	TUBB				
16	State Land 15	3	TUBB				
16	State DA #5	5	DRINKARD				
16	State DA #5	4	DRINKARD	159005	573	2306	21
16	State DA #5	3	DRINKARD	137311	968	1776	20
16	State Land 15	5	DRINKARD				
16	State Land 15	4	DRINKARD	233379	59153	2427	26
16	State Land 15	6	DRINKARD	84853	30935	2756	11
16	State Land 15	3	DRINKARD	152184	90	7	21

Volumetrics for the proposed location are as follows:

		PROD ZONE NAME	RESERVOIR	DRAINAGE	EUR	
			PRESSURE	ACRES	OIL (BO)	GAS (BCFG)
State Land 15	9	BLINEBRY GAS CAP	500	0	0	0
		BLINEBRY OIL LEG	900	20	33,476	569
		TUBB	500	0	0	0
		DRINKARD	1500	20	92,671	1,112
		<b>TOTAL</b>			<b>126,147</b>	<b>1,781</b>

**d. Drainage for State 15 #10:**

The proposed **State 15 #10** is approximately equidistant from the productive Blinebry, Tubb, and Drinkard wells in W/2SE/4, §16 and E/2SW/4, §16 and should encounter an undrained reservoir volume. Reservoir engineering used the SoPhiH maps to estimate drainage of each offsetting well in each reservoir. Recoverable reserves for this location are calculated as the volume under a 20 a radius (less if the direct offsets were not capable of draining 20 A) with reduced reservoir pressure where drainage has occurred. Drainage offsetting this location is as follows:

SEC	LEASE NAME	WELL	PROD ZONE NAME	EUR			DRAINED ACRES
				OIL	WATER	GAS	
16	STATE LAND 15	6	BLINEBRY GAS CAP				
16	STATE LAND 15	3	BLINEBRY GAS CAP	26090	19725	2609	116
16	STATE LAND 15	2	BLINEBRY GAS CAP	18270	18554	1827	96
21	WEATHERLY	4	BLINEBRY GAS CAP	7190	21310	719	30
21	WEATHERLY	3	BLINEBRY GAS CAP	43600	18755	4360	210
16	STATE LAND 15	6	BLINEBRY OIL LEG				
16	STATE LAND 15	3	BLINEBRY OIL LEG	233251	19725	1473	54
16	STATE LAND 15	2	BLINEBRY OIL LEG	52690	18554	365	15
21	WAETHERLY	4	BLINEBRY OIL LEG	126065	21310	816	26
21	WEATHERLY	3	BLINEBRY OIL LEG	48521	18755	332	13
16	STATE LAND 15	6	TUBB				
16	STATE LAND 15	3	TUBB				
16	STATE LAND 15	2	TUBB				
21	WEATHERLY	4	TUBB				
21	WEATHERLY	3	TUBB				
16	STATE LAND 15	6	DRINKARD	84853	30935	2756	11
16	STATE LAND 15	3	DRINKARD	152184	90	7	21
16	STATE LAND 15	2	DRINKARD	180687	16287	1575	22
21	WEATHERLY	4	DRINKARD	229737	8465	2062	23
21	WEATHERLY	3	DRINKARD	173489	3616	1770	19

Volumetrics for the proposed location are as follows:

			RESERVOIR	DRAINAGE	EUR	
		PROD ZONE NAME	PRESSURE	ACRES	OIL (BO)	GAS (BCFG)
State Land 15	10	BLINEBRY GAS CAP	500	0	0	0
		BLINEBRY OIL LEG	1100	20	33795	507
		TUBB	1500	20	4190	419
		DRINKARD	1700	19	95407	954
		<b>TOTAL</b>			<b>133,393</b>	<b>1,880</b>

#### 4. NOTICE

John H Hendrix Corporation and Apache operate the Blinebry, Tubb, Drinkard, and Abo wells toward which the proposed well will encroach. Apache is the only working interest owner in the wells it operates. Hendrix has been notified at:

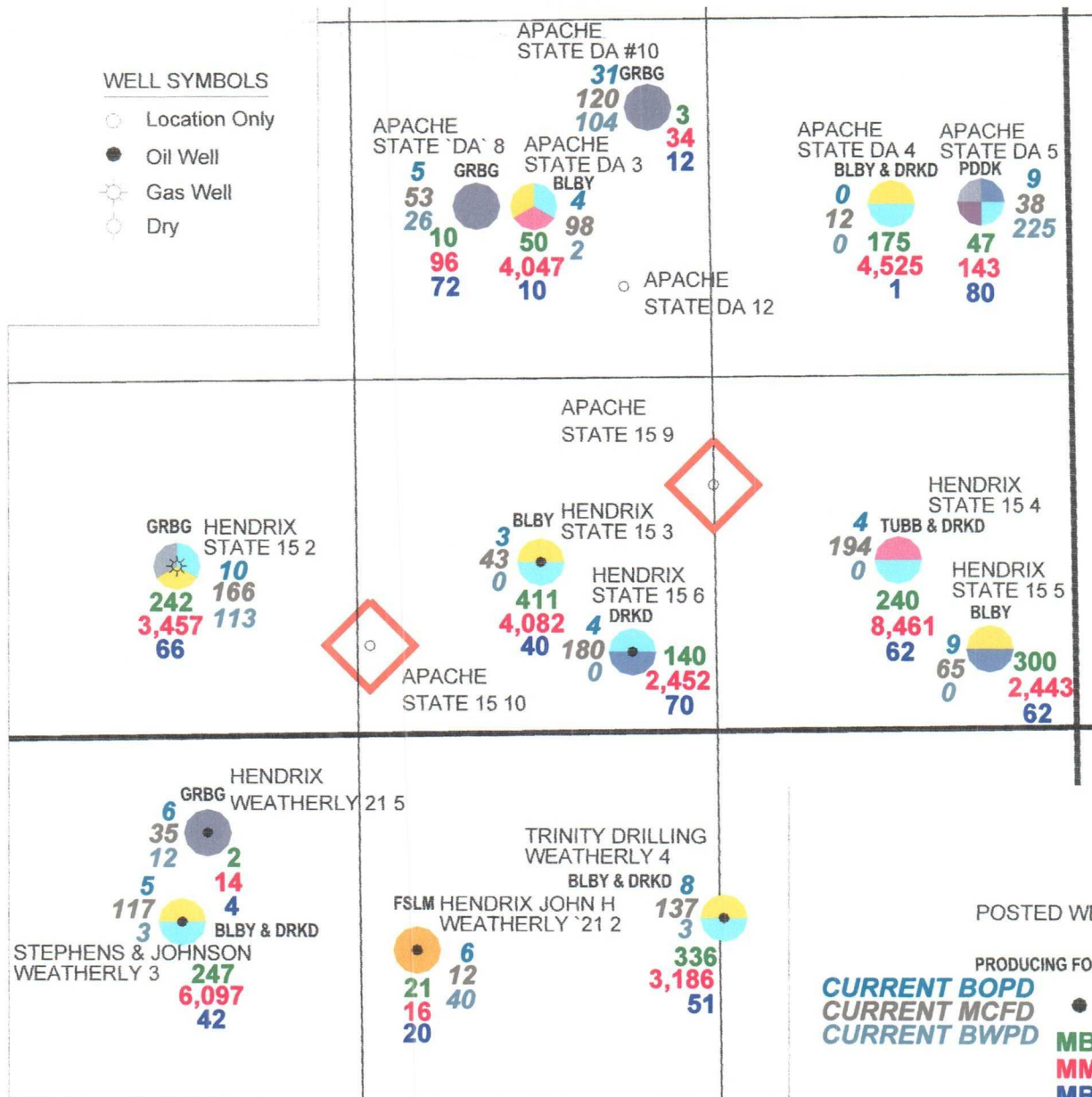
John H Hendrix Corporation  
110 N Marenfeld  
Suite 400  
Midland, TX 79701

Apache Corporation has negotiated a farmout arrangement with Hendrix whereby it will drill and complete, then turn the well over to Hendrix for production. All four reservoirs are contained within one oil and gas lease (State Land 15, which includes the entire S/2, §16) with common working and revenue interest owners.

- Approval of this application will afford the interest owners in this spacing unit an opportunity to recover oil and gas which would not otherwise be recovered and to do so without violating correlative rights.

# WELL SYMBOLS

- Location Only
- Oil Well
- ☀ Gas Well
- Dry



## PRODUCTION

- YATES-SEVEN RIVERS-QUEEN
- GRAYBURG
- SAN ANDRES
- PADDOCK
- BLINEBRY
- TUBB
- DRINKARD
- ABO
- FUSSELMAN



TWO WARREN PLACE, SUITE 1500  
 6120 SOUTH YALE  
 TULSA, OKLAHOMA 74136-4224

**STATE 15 # 9 & # 10**

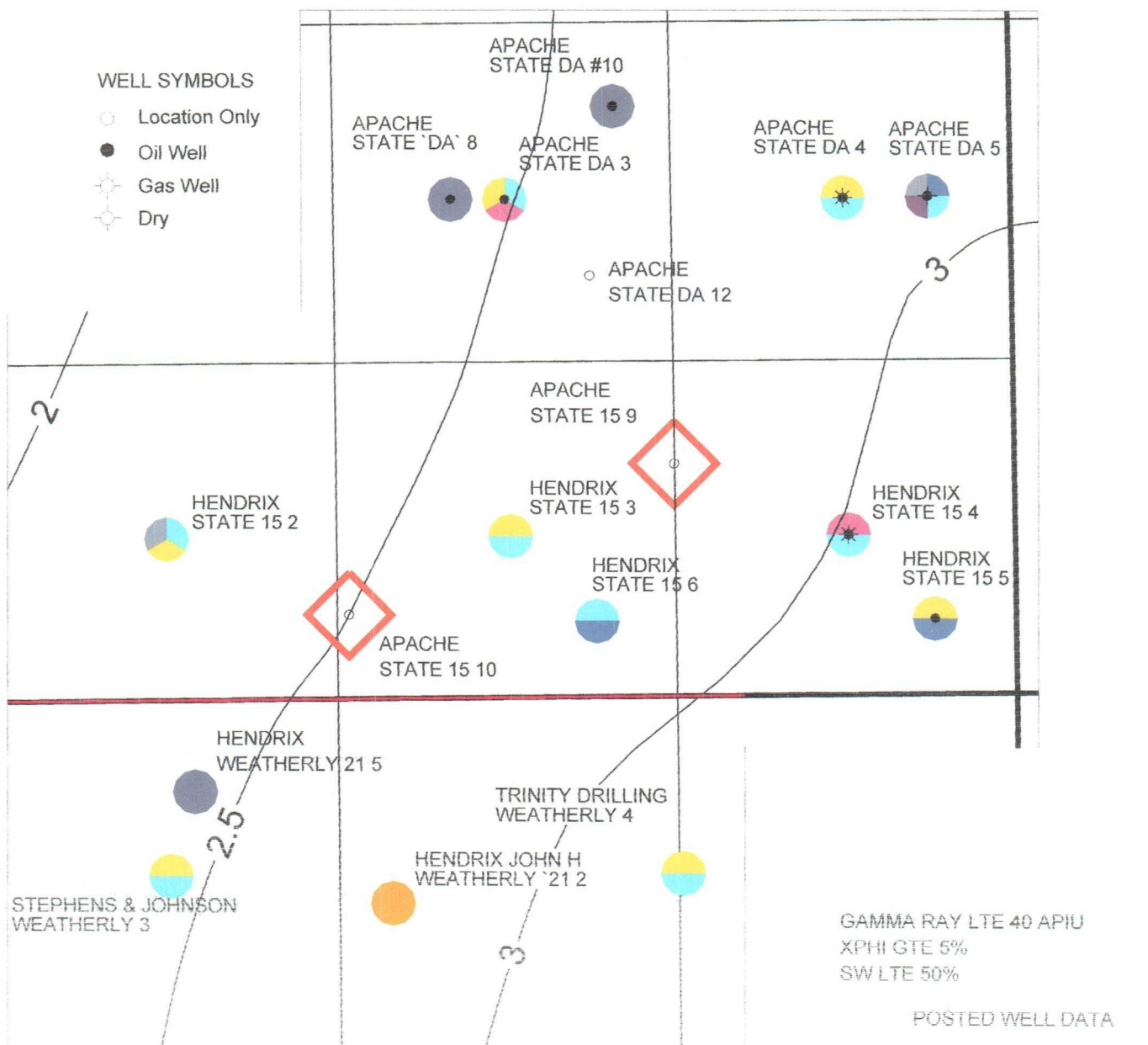
SEC 16-T21S-R37E  
 LEA COUNTY, NEW MEXICO

**EXHIBIT 2**

**WELL INFORMATION**

DATE: 6/30/05

DWG: CURTIS\OCD-NM\2005\STATE 15\EX 2



**BLBY GAS CAP  
SOPHIH**

● OPERATOR  
WELL LABEL

PRODUCTION



TWO WARREN PLACE, SUITE 1500  
8120 SOUTH YALE  
TULSA, OKLAHOMA 74136-4224

CENTRAL REGION

**STATE 15 #9 & #10**

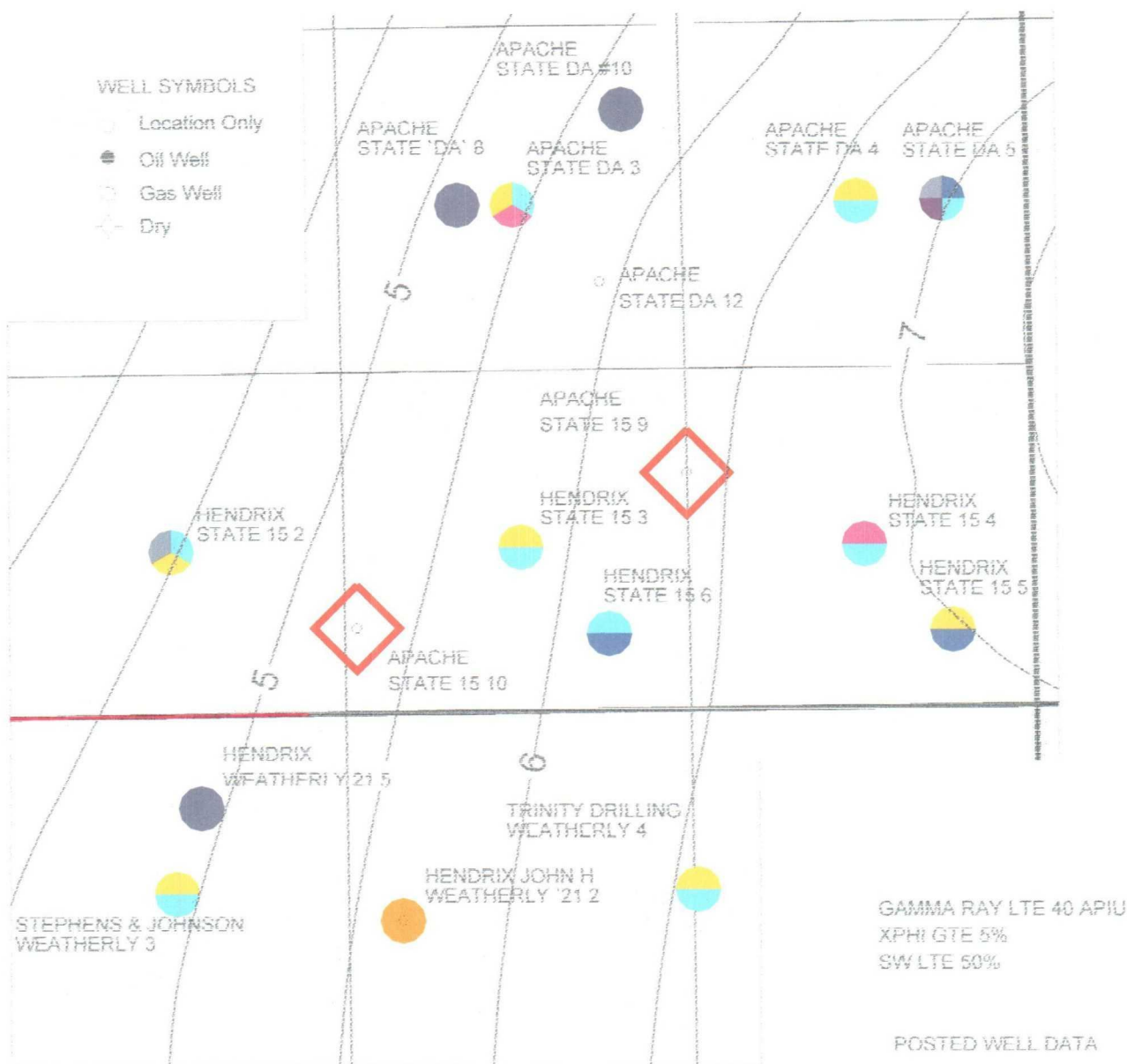
SEC 16-T218-R37E  
LEA COUNTY, NEW MEXICO

**EXHIBIT 3**

BLBY GAS CAP SOPHIH

DATE: 6/30/05 DWG: CURTIS/DCD-NM2005/STATE 15/EX3





PRODUCTION

**BLBY OIL LEG SOPHIH**

● OPERATOR WELL LABEL

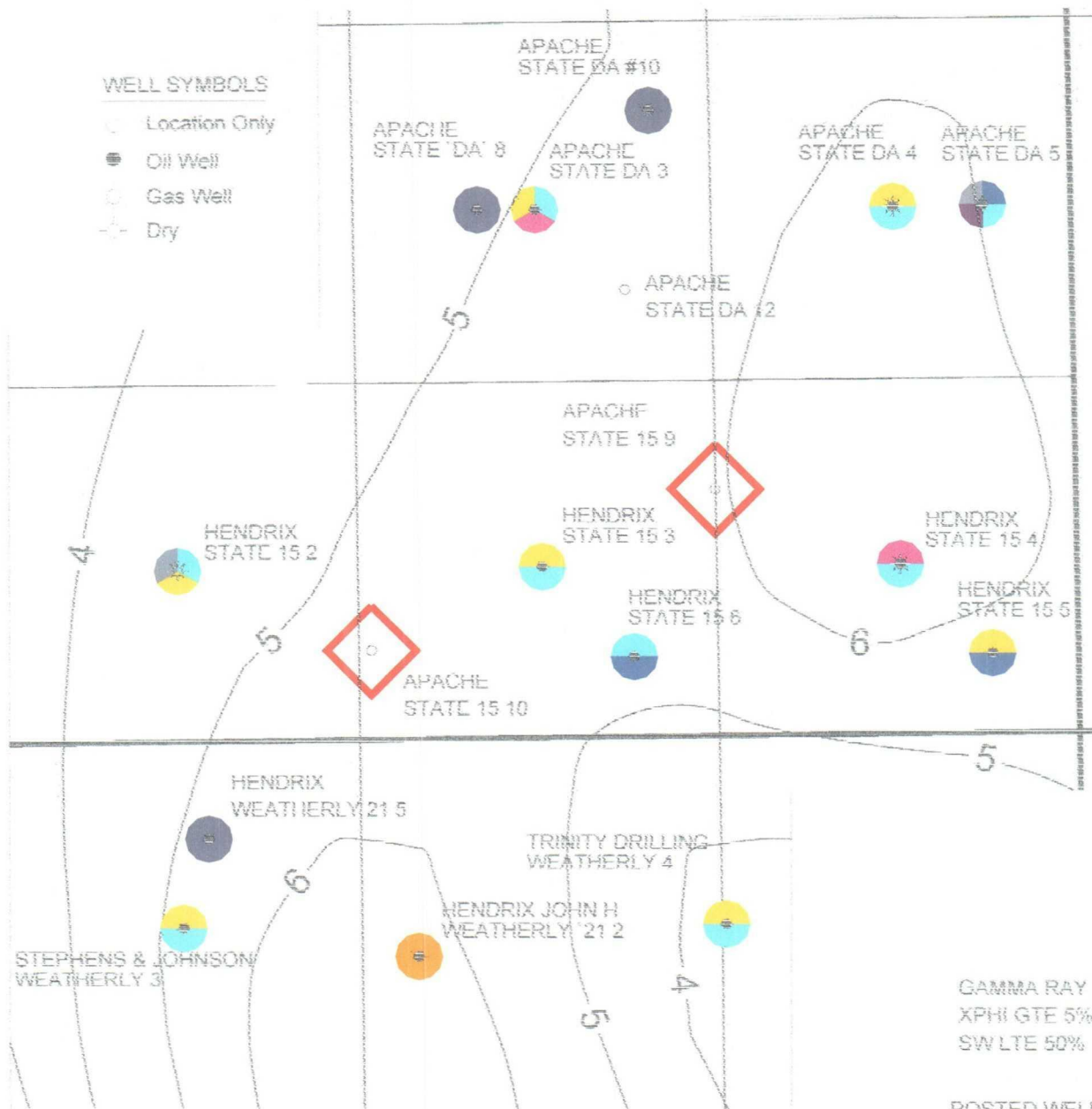
- |                            |             |
|----------------------------|-------------|
| ● YATES-SEVEN RIVERS-QUEEN | ● TUBB      |
| ● GRAYBURG                 | ● DRINKARD  |
| ● SAN ANDRES               | ● ABO       |
| ● PADDOCK                  | ● FUSSELMAN |
| ● BLINEBRY                 |             |



	TWO WARREN PLACE, SUITE 1500 6120 SOUTH YALE TULSA, OKLAHOMA 74136-4224
	CENTRAL REGION
STATE 15 #9 & #10	
SEC 16-T21S-R37E LEA COUNTY, NEW MEXICO	
EXHIBIT 4	
BLBY OIL LEG SOPHIH	
DATE: 6/30/05	DWG: CURTIS/CCD-NM2005/STATE 15 EX4

# WELL SYMBOLS

- Location Only
- Oil Well
- Gas Well
- ⊖ Dry



GAMMA RAY LTE 50 APIU  
XPHI GTE 5%  
SW LTE 50%

POSTED WELL DATA

PRODUCTION

**TUBB  
SOPHIH**

● OPERATOR  
WELL LABEL

- |                            |             |
|----------------------------|-------------|
| ● YATES-SEVEN RIVERS-QUEEN | ● TUBB      |
| ● GRAYBURG                 | ● DRINKARD  |
| ● SAN ANDRES               | ● ABO       |
| ● PADDOCK                  | ● FUSSELMAN |
| ● BLINBRY                  |             |



**Apache**  
CORPORATION  
CENTRAL REGION

TWO WARREN PLACE, SUITE 1500  
8120 SOUTH YALE  
TULSA, OKLAHOMA 74136-4224

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**STATE 15 #9 & #10**

SEC 16-T215-R37E  
LEA COUNTY, NEW MEXICO

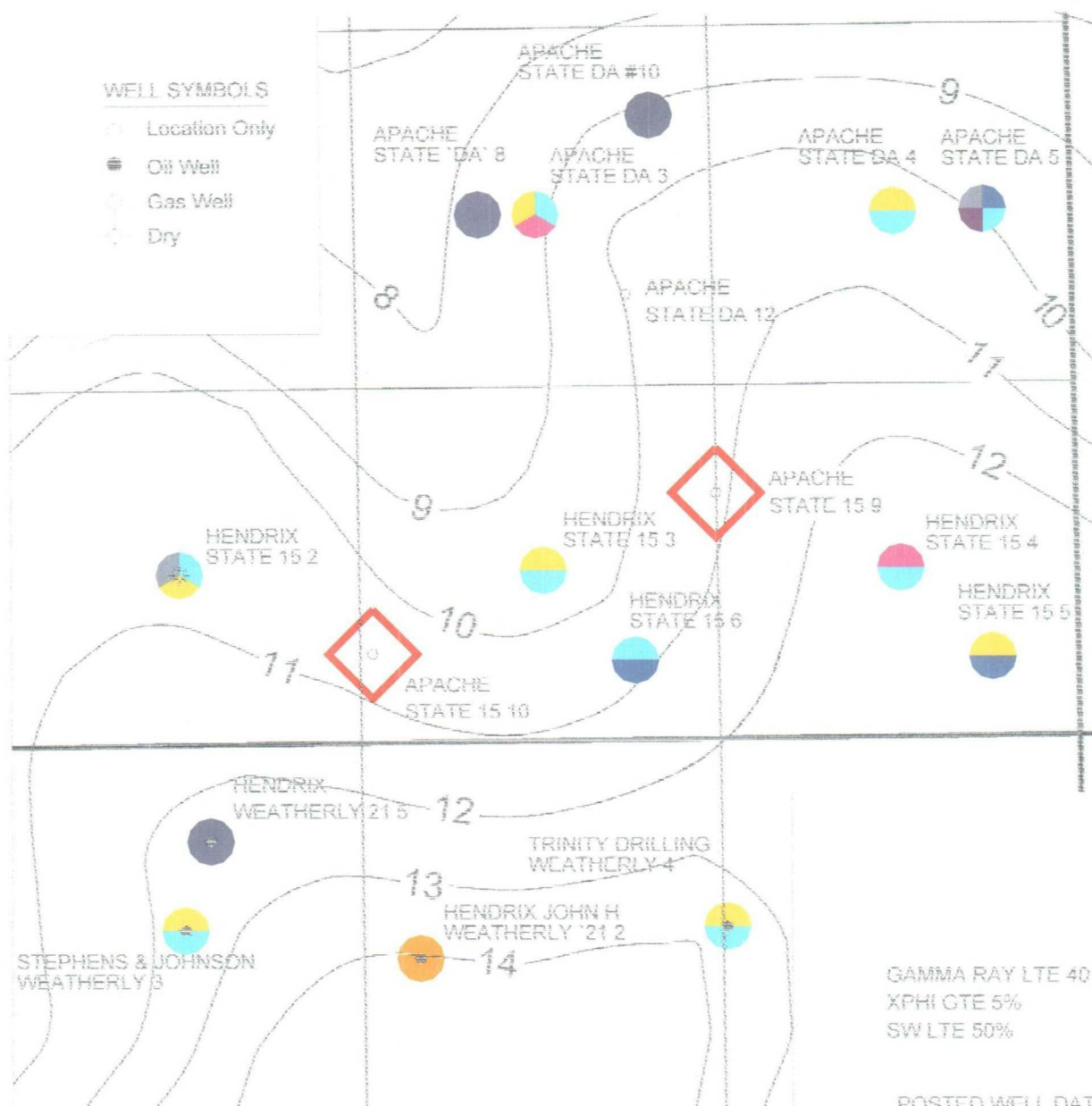
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**EXHIBIT 5**

TUBB SOPHIH

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DATE: 6/30/05      DWG/CURTIS/OCD-NM/2005/STATE 15 EX 5



**PRODUCTION**

- |                            |             |
|----------------------------|-------------|
| ● YATES-SEVEN RIVERS-QUEEN | ● TUBB      |
| ● GRAYBURG                 | ● DRINKARD  |
| ● SAN ANDRES               | ● ARO       |
| ● PADDOCK                  | ● FUSSELMAN |
| ● BLINBERRY                |             |

0 500 1,000 1,500

**DRKD  
SOPHIH**

● OPERATOR  
WELL LABEL

<p>APACHE CORPORATION CENTRAL REGION</p>	<p>TWO WARREN PLACE, SUITE 1500 6120 SOUTH YALE TULSA, OKLAHOMA 74136-4224</p>
	<p><b>STATE 15 #9 &amp; #10</b></p>
<p>SEC 16-T21S-R37E LEA COUNTY, NEW MEXICO</p>	
<p><b>EXHIBIT 6</b></p>	
<p>DRKD SOPHIH</p>	
<p>DATE: 8/30/05</p>	<p>DWG: CURTIS/CCD-NM2005STATE-15 EX 6</p>