

Hawk B-1 #39

DATE IN 2-21-05	SUSPENSE 3-14-05	ENGINEER MES	LOGGED IN ms	TYPE NSL	APP NO. PMEB-508736406
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
 - Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505



p- 8-21-37

### 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-Qualified 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

30-025-36532

Oil Conservation Division  
 1220 S. St. Francis Drive  
 Santa Fe, NM 87505

FEB 21 2005

RECEIVED

[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.

James Bruce		Attorney for applicant	2/18/05
Print or Type Name	Signature	Title	Date
		jamesbruc@aol.com	
		e-mail Address	

**JAMES BRUCE**  
ATTORNEY AT LAW

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February 18, 2005

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

Re: Request to Amend Division Administrative Order NSL-4954(SD) to include the San Andres formation

Dear Mr. Stogner:

Pursuant to Division Rule 104.F(2), Apache Corporation applies for administrative approval of an unorthodox oil well location in the San Andres formation for the following well:

<u>Well:</u>	Hawk B-1 Well No. 39
<u>Location:</u>	1200 feet FSL & 80 feet FEL
<u>Well Units:</u>	SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 8, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico

The well was originally drilled to and completed in the Grayburg formation (Penrose Skelly (Grayburg) Pool). The Grayburg unorthodox location was approved by NSL-4954-SD.

The well is in the Undesignated East Hare-San Andres (Oil) Pool,<sup>1</sup> which is developed on statewide rules, with 40 acre spacing and wells to be located no closer than 330 feet to a quarter-quarter section line.

The application is based on several reasons: (1) the well was drilled to the Grayburg, with a "tail" in the San Andres formation, and thus testing the San Andres will be very economical; and (2) applicant's other San Andres wells in this township indicate that there are San Andres reserves underlying this lease. A complete discussion, with appropriate exhibits, is attached as Exhibit A.

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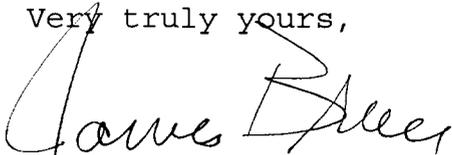
<sup>1</sup> See Division Order No. R-12190. The oil pool includes the S $\frac{1}{2}$  of Section 9.

Applicant has an ongoing program to drill infill Grayburg (and other) wells in this township, and the San Andres, which lies immediately below the Grayburg, can be accessed at a low cost. In some cases it may not be economically feasible to drill a stand alone San Andres well, and completing the wells in both zones makes the wells more economical and extends their lives, thus preventing waste and protecting correlative rights.

Attached as Exhibit B is a land plat, highlighting the proposed well's location. The SE $\frac{1}{4}$  of Section 8 and SW $\frac{1}{4}$  of Section 9 (and other acreage) is covered by a single federal lease (NM 90161), **which has common royalty, overriding royalty, and working interest ownership in the Grayburg and San Andres formations.** Although the well is very unorthodox, there are no adversely affected interest owners, and no one has been notified of this application.

Please call me if you need any further information on this matter.

Very truly yours,

A handwritten signature in cursive script that reads "James Bruce". The signature is written in dark ink and is positioned above the typed name.

James Bruce

Attorney for Apache Corporation

Application of Apache Corporation for administrative approval of an unorthodox well location:

40 acres – 1200' FSL & 80' FEL  
 Section 8, Township 21 South, Range 37 East, NMPM  
 Lea County, New Mexico

PRIMARY OBJECTIVE: SAN ANDRES

In support:

1. Apache Corporation (Apache) is the operator of the **Hawk B-1 #39** well. The total depth drilled is 4350' in the San Andres formation. It is currently perforated in and producing from the Grayburg.
2. The well was drilled in the Penrose Skelly; Grayburg Oil Pool with a "tail" into the San Andres Formation. Administrative Order NSL-4954 was issued for the Grayburg reservoir. Order R-12190 now extends the East Hare San Andres Oil Pool to within 80 feet of this location. As to the San Andres reservoir, the location encroaches toward the following well (**Exhibit 1**).

OPER	WELL	LOC	RESERVOIR	CUM O/G/W	DAILY O/G/W
Apache	Hawk B-1 #40	09-M	San Andres	1/13/13	17/510/256
				MBO	BOPD
				MMCFG	MCFGPD
				MBW	BWPD

3. The **Hawk B-1 #39** unorthodox San Andres location of 1200' from south line and 80' from east line is based on wellbore availability.
  - a) **Exhibit 2** (San Andres Net Pay) illustrates that sufficient reservoir is present to contain and produce commercial amounts of hydrocarbons.
  - b) Oil production from the San Andres is newly established in the immediate area. Drilling a separate well for these reserves is not economically prudent.
  - c) Even though the location is unorthodox, the entire drainage area is contained within the Hawk B-1 lease.
  - d) The following table provides drainage areas calculated from the net pay map and reserves of offsetting San Andres well.

WELL	LOC	AREA A	EUR MBO	EUR MMCFG
Hawk B-1 #40	09-M	38	33	1200

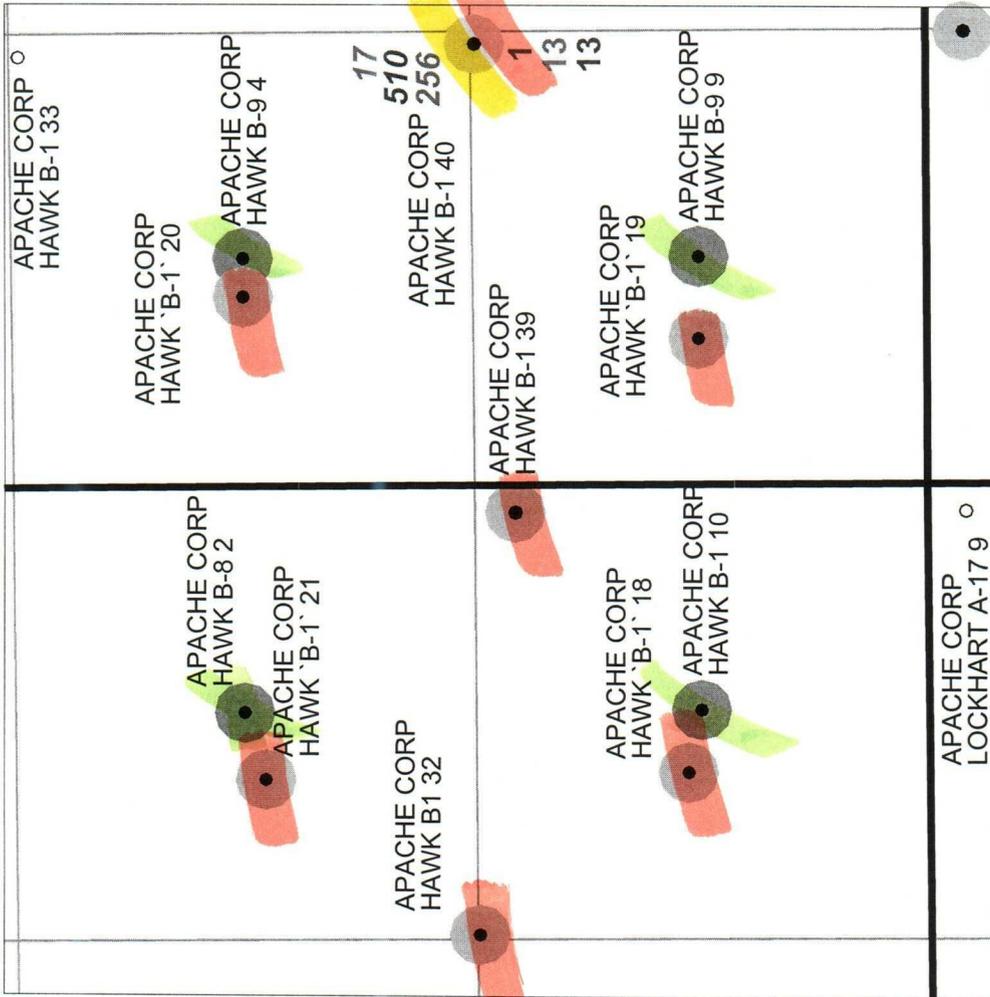


Volumetrics and reserves for the **Hawk B-1 #39** are:

<b>WELL</b>	<b>LOC</b>	<b>AREA A</b>	<b>EUR MBO</b>	<b>EUR MMCFG</b>
Hawk B-1 #39	08-P	38	10	500

4. Notice

- a. The Hawk Federal Lease covers, among other acreage, the SE $\frac{1}{4}$  §8 and SW $\frac{1}{4}$  §9. Interest ownership in the San Andres Formation is common in the lease. Therefore, there are no adversely affected parties and no one was notified of the application.
5. 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.



**WELL SYMBOLS**

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

**POSTED WELL DATA**

- OPERATOR WELL LABEL
- CURRENT BOPD
- CURRENT MCFD
- CURRENT BWPD
- MBO
- MMCFG
- MBW

<p>APACHE CORPORATION CENTRAL REGION</p>	<p>TWO WARREN PLACE, SUITE 1500 6120 SOUTH YALE TULSA, OKLAHOMA 74136-4224</p>
	<p><b>HAWK B-1 # 39</b></p>
<p>SEC 8-T21 S-R37E LEA COUNTY, NEW MEXICO</p>	
<p><b>EXHIBIT 1</b> WELL INFORMATION</p>	
<p>DATE: 5/26/04 DWG: PROD (CURTIS/OCD-NM2004 SAN ANDRES)</p>	

- YATES-SEVEN RIVERS-QUEEN
- GRAYBURG
- SAN ANDRES
- BLINEBRY-TUBBS-DRINKARD
- ABO
- LOWER PALEOZOIC



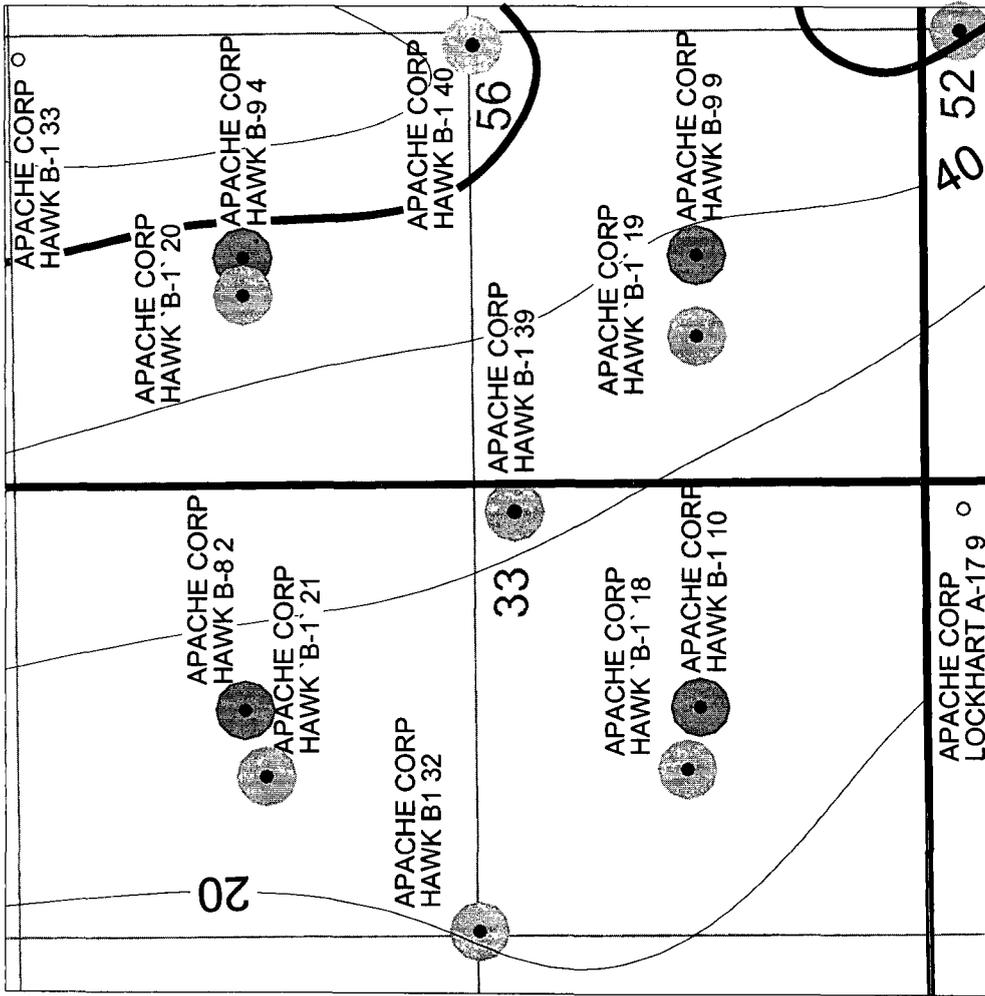
POROSITY  $\geq$  6%  
 GAMMA RAY  $\leq$  30 APIU  
 WATER SATURATION  $\leq$  50%

**WELL SYMBOLS**

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

**POSTED WELL DATA**

**SAN ANDRES** ● OPERATOR  
**NET PAY** ● WELL LABEL



- YATES-SEVEN RIVERS-QUEEN
- GRAYBURG
- SAN ANDRES
- BLINEBRY-TUBBS-DRINKARD
- ABO
- LOWER PALEOZOIC



**Apache** CORPORATION  
 CENTRAL REGION  
 TWO WARREN PLACE, SUITE 1500  
 6120 SOUTH YALE  
 TULSA, OKLAHOMA 74136-4224

**hawk b-1 # 39**

SEC 8-T21S-R37E  
 LEA COUNTY, NEW MEXICO

**EXHIBIT 2**  
**SAN ANDRES**  
**NET PAY**

DATE: 5/26/04 DWG: PROD (CURTIS\OCD-NM\2004 SAN ANDRES)

