

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
P.O. Box Drawer DD, Artesia, NM 88211-0719
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-101
Revised February 10, 1999
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copy
Fee Lease - 5 Copy
☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address CHEVRON USA INC 15 SMITH RD, MIDLAND, TX 79705		² OGRID Number 4323
⁴ Property Code 2682	⁵ Property Name H.T. MATTERN NCT-B	³ API Number 30-025-24968
		⁶ Well No. 19

⁷ 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	31	21-S	37-E		1830'	NORTH	660'	WEST	LEA

⁸ Proposed 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
⁹ Proposed Pool 1 TUBB OIL AND GAS					¹⁰ Proposed Pool 2				

¹¹ Work Type Code P	¹² WellType Code O	¹³ Rotary or C.T. ROTARY	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3484' GL
¹⁶ Multiple No	¹⁷ Proposed Depth 6800'	¹⁸ Formation TUBB	¹⁹ Contractor	²⁰ Spud Date 2/28/2006

²¹ Proposed Casing and Cement Program

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
NO CHANGE					

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone.
Describe the blowout prevention program, if any. Use additional sheets if necessary.
CHEVRON U.S.A. INC. INTENDS TO RECOMLETE THE SUBJECT WELL FROM THE DRINKARD POOL TO THE TUBB RESERVOIR.
A PIT WILL NOT BE USED FOR THIS PLUGBACK. A STEEL FRAC TANK WILL BE UTILIZED.
THE INTENDED PROCEDURE, AND CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway
Plugback

²³ I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature <i>Denise Pinkerton</i>		Approved By: <i>[Signature]</i>	
Printed Name Denise Pinkerton		Title: PETROLEUM ENGINEER	
Title Regulatory Specialist		Approval Date: MAR 02 2006	
Date 2/13/2006		Expiration Date:	
Telephone 432-687-7375		Conditions of Approval: Attached <input type="checkbox"/>	

H. T. Mattern B # 19
Tubb O&G Field
T21S, R37E, Section 31
Job: PB To Tubb Formation, Acidize, And Frac

Procedure:

1. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. AGU, EMSU, and EMSUB buried fiberglass lines will be tested with 300 psi. All polypipe (SDR7 and SDR11) will be tested w/100 psi. All steel lines will be tested w/500 psi. If a leak is found, contact Donnie Ives for repair/replacement. If test is good, bleed off pressure and **open valve** at header. Document this process in the morning report.
2. MI & RU workover unit. Bleed pressure from well, if any. Pump down csg with 8.6 PPG cut brine water, if necessary to kill well. POH with rods and pump. Remove WH. Install BOP's and test to 1000 psi. POH LD 2 3/8" tbg string.
3. PU and GIH with 4 3/4" MT bit and 2 7/8" work string to 6763'. POH with work string and bit. LD bit.
4. PU and GIH with 5 1/2" RBP to 6480'. Set RBP at 6480'. Spot 20' sand on top of RBP. PUH to 6400'. Reverse circulate well clean from 6400' using 8.6 PPG cut brine water. Pressure test csg and CIBP to 500 psi. POH with 2 7/8" work string.
5. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct GR/CBL/CCL log from 6460' up to 2600'. POH. Inspect logs for good cement bond from approximately 6500' up to 5900'. If bond does not appear to be good across proposed completion interval, discuss with Engineering before proceeding. Cmt squeeze as necessary to obtain good cmt across completion interval. GIH with 3 1/8" DP slick casing gun and perforate from 6150-58', 6178-86', 6192-6200', 6208-16', 6220-28', 6234-38', 6246-54', 6260-66', 6270-76', 6280-88', 6294-6300', 6340-48', 6368-76', and 6421-29' with 4 JSPF at 120 degree phasing, using 23 gram premium charges. POH. RD & release electric line unit. **Note: Use Dresser Atlas BHC Acoustilog dated 3/29/75 for depth correlation.**
6. PU and GIH w/ 5 1/2" PPI pkr (with 10' element spacing) and SCV on 2 7/8" work string to approximately 6150'. Test tbg to 5500 psi while GIH.
7. MI & RU DS Services. Acidize perms 6150-6429' with 2,800 gals anti-sludge 15% HCl acid * at a maximum rate **as shown below** and a maximum surface pressure of **5000 psi**. Spot acid across perms at beginning of each stage and let soak to lower breakdown pressure and prevent communication. Pump job as follows:

Interval	Amt. Acid	Max Rate	PPI Setting
6421-29'	200 gals	½ BPM	6420-30'
6368-76'	200 gals	½ BPM	6367-77'
6340-48'	200 gals	½ BPM	6339-49'
6294-6300'	200 gals	½ BPM	6293-6303'
6280-88'	200 gals	½ BPM	6279-89'
6270-76'	200 gals	½ BPM	6268-78'
6260-66'	200 gals	½ BPM	6258-68'
6246-54'	200 gals	½ BPM	6245-55'
6234-38'	200 gals	½ BPM	6233-43'
6220-28'	200 gals	½ BPM	6219-29'
6208-16'	200 gals	½ BPM	6207-17'
6192-6200'	200 gals	½ BPM	6191-6201'
6178-86'	200 gals	½ BPM	6177-87'
6150-58'	200 gals	½ BPM	6149-59'

Displace acid with 8.6 PPG cut brine water -- do not overdisplace. Use a SCV to control displacement fluid. Record ISIP, 5 & 10 minute SIP's. RD and release DS services. **Note:** Pickle tubing in 1 run of 500 gals acid, prior to acidizing perfs. Pickle acid is to contain only 1/2 gal A264 and 1 gal W53. Also, if communication occurs during treatment of any interval, monitor casing pressure and attempt to complete stage w/o exceeding 500 psi csg pressure. If cannot, then move PPI to next setting depth and combine treatment volumes of the intervals.

* Acid system is to contain:	1 GPT A264	Corrosion Inhibitor
	8 GPT L63	Iron Control Agent
	2 PPT A179	Iron Control Aid
	20 GPT U66	Mutual Solvent
	2 GPT W53	Non-Emulsifier

8. Release PPI pkr and PUH to approximately 6100'. Swab back all intervals together. Recover 100% of treatment and load volumes before shutting well in for night, if possible. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. **Note: Selectively swab perfs as directed by Engineering if excessive water is produced.**
9. Open well. Release PPI pkr. POH with tbg and PPI packer. LD PPI tool.
10. PU and GIH w/ 5 ½" Lok-Set pkr & On-Off tool w/ 2.25" "F" profile and 161 jts. of 3 ½" EUE 8R L-80 work string, testing to 8500 psi. Set pkr at approximately 5000'. Install frac head. Pressure annulus to 500 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.
11. MI & RU DS Services and Tracer-Tech Services (Mike Mathis (866) 595-3115). Install casing saver. Frac well down 3 ½" tubing at **40 BPM** with 88,000 gals of YF130, 176,000 lbs. 16/30 mesh Jordan Sand, and 30,000 lbs **resin-coated** 16/30 mesh CR1630 proppant. Observe a

maximum surface treating pressure of **8000 psi**. Tag frac with 2 radioactive isotopes (1 in main proppant stages, and 1 in resin-coated proppant stage). Pump job as follows:

Pump 2,000 gals 2% KCL water containing 55 gals Baker RE 4777-SCW Scale Inhibitor
Pump 1,000 gals 2% KCL water spacer
Pump 14,000 gals YF130 pad containing 5 GPT J451 Fluid Loss Additive
Pump 14,000 gals YF130 containing 0.5 PPG 16/30 mesh Jordan Sand & 5 GPT J451 FL Additive
Pump 12,000 gals YF130 containing 1.5 PPG 16/30 mesh Jordan Sand
Pump 12,000 gals YF130 containing 2.5 PPG 16/30 mesh Jordan Sand
Pump 14,000 gals YF130 containing 3.5 PPG 16/30 mesh Jordan Sand
Pump 16,000 gals YF130 containing 4.5 PPG 16/30 mesh Jordan Sand
Pump 6,000 gals YF130 containing 5 PPG **resin-coated** 16/30 mesh CR1630 proppant.

Flush to 6091' with 2,919 gals WF130. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services and Tracer-Tech Services. **Leave well SI overnight.**

12. Open well. GIH and swab well until there is no sand inflow. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. Release pkr and POH with 3 ½" work string. Lay down 3 ½" work string and pkr.
13. PU and GIH with 4 ¾" MT bit on 2 7/8" work string to 6460'. If fill is found above 6460', clean out fill using 8.6 PPG cut brine water and air unit (if necessary). POH with 2 7/8" work string and bit. LD bit.
14. PU & GIH with 5 ½" pkr on 2 7/8" work string to 6050'. Set pkr at 6050'. Open well. GIH and swab well until there is no sand inflow. Swab well for at least 3 hours before logging. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct after-frac PRISM GR/Temp/CCL log from 6460' up to 5500'. POH. RD & release electric line unit. **Note: Correlate logs and run flat with Baker Atlas GR/CBL/CCL Log conducted in Step # 5.**
15. Release pkr. POH LD 2 7/8" work string and pkr.
16. PU and GIH w/ BP mud anchor jt of 2 7/8" tbg, 2 7/8" x 4' perforated sub, SN, 1 jt 2 7/8" EUE 8R J-55 IPC tbg, 13 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 192 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 6000', with EOT at 6435' and SN at 6400'.
17. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release pulling unit.
18. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

Well: **H. T. Mattern (NCT-B) # 19**

Field: **Drinkard**

Reservoir: **Drinkard**

**Current
Wellbore Diagram**

Location:

1830' FNL & 660' FWL
Section: 31
Township: 21S
Range: 37E Unit: E
County: Lea State: NM

Well ID Info:

Chevno: EO3764
API No: 30-025-24968
L5/L6: U415000
Spud Date: 3/12/75
Compl. Date: 4/8/75

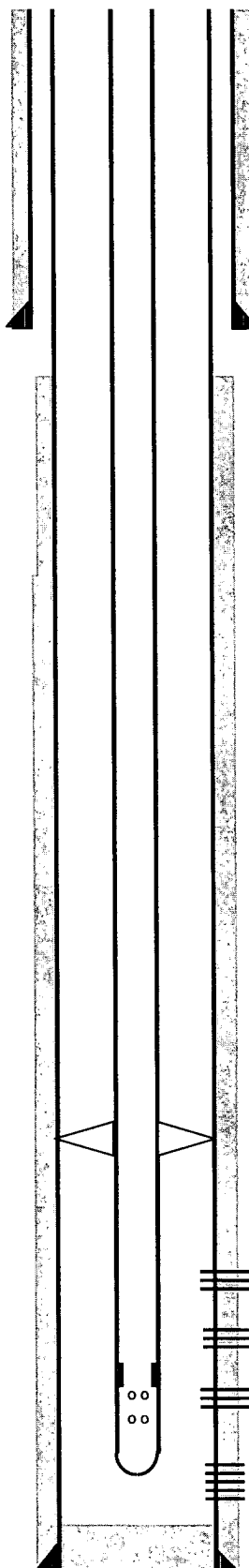
Elevations:

GL: 3484'
KB: 3498'
DF: 3497'

Surf. Csg: 8-5/8", 24#, K-55
Set: @ 1204' w/425 sx cmt
Size of hole: 11"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	14.00
197	Jts. 2 3/8" EUE 8R J-55 Tbg	6107.93
	TAC	2.80
18	Jts. 2 3/8" EUE 8R J-55 Tbg	559.90
	SN	1.10
	2 3/8" x 4' Perf Tbg Sub	4.10
1	Jt. 2 3/8" EUE 8R J-55 Tbg	29.72
	Bull Plug	0.50
216	Bottom Of String >>	6720.05



Perfs	Status
6508-10'	Drinkard - Open
6526-28'	Drinkard - Open
6553-55'	Drinkard - Open
6585-87'	Drinkard - Open
6630-32'	Drinkard - Open
6664-66'	Drinkard - Open
6706-08'	Drinkard - Open

COTD: 6763'
PBTD: 6763'
TD: 6800'

Prod. Csg: 5-1/2", 15.5# K-55
Set: @ 6799' w/700 sx cmt
Size of hole: 7-7/8"
Circ: No **TOC:** 2017'
TOC By: Temperature Survey

Updated: 2/9/06

By: A. M. Howell

Well: **H. T. Mattern (NCT-B) # 19**

Field: **Tubb O&G**

Reservoir: **Tubb**

60240

Proposed Wellbore Diagram

Location:
1830' FNL & 660' FWL
Section: 31
Township: 21S
Range: 37E Unit: E
County: Lea State: NM

Elevations:
GL: 3484'
KB: 3498'
DF: 3497'

Well ID Info:
Chevno: EO3764
API No: 30-025-24968
L5/L6: U47
Spud Date: 3/12/75
Compl. Date: 4/8/75

Surf. Csg: 8-5/8", 24#, K-55
Set: @ 1204' w/425 sx cmt
Size of hole: 11"
Circ: Yes **TOC:** Surface
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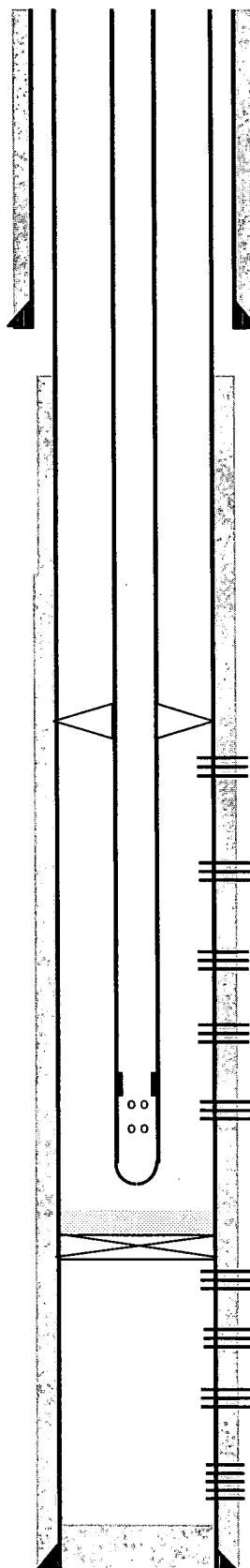
Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	14.00
192	Jts. 2 7/8" EUE 8R J-55 Tbg	5952.00
	TAC	2.93
13	Jts. 2 7/8" EUE 8R J-55 Tbg	403.00
1	Jts. 2 7/8" EUE 8R J-55 IPC Tbg	31.00
	SN	1.10
	2 7/8" x 4' Perf Tbg Sub	3.87
1	Jt. 2 7/8" EUE 8R J-55 Tbg	29.65
	Bull Plug	0.50
207	Bottom Of String >>	6438.05

RBP @ 6480'
(20' sand on top)

COTD: 6460'
PBTD: 6460'
TD: 6800'

Updated: 2/9/06



Perfs	Status
6150-58'	Tubb - Open
6178-86'	Tubb - Open
6192-6200'	Tubb - Open
6208-16'	Tubb - Open
6220-28'	Tubb - Open
6234-38'	Tubb - Open
6246-54'	Tubb - Open
6260-66'	Tubb - Open
6270-76'	Tubb - Open
6280-88'	Tubb - Open
6294-6300'	Tubb - Open
6340-48'	Tubb - Open
6368-76'	Tubb - Open
6421-29'	Tubb - Open

Perfs	Status
6508-10'	Drinkard - Open
6526-28'	Drinkard - Open
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6585-87'	Drinkard - Open
6630-32'	Drinkard - Open
6664-66'	Drinkard - Open
6706-08'	Drinkard - Open

Prod. Csg: 5-1/2", 15.5# K-55
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Size of hole: 7-7/8"
Circ: No **TOC:** 2017'
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By: A. M. Howell

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Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-24968	² Pool Code 60240	³ Pool Name TUBB OIL AND GAS
⁴ Property Code 2682	⁵ Property Name H.T. MATTERN NCT-B	⁶ Well No. 19
⁷ OGRID Number 4323	⁸ Operator Name CHEVRON USA INC	⁹ Elevation 3484' GL

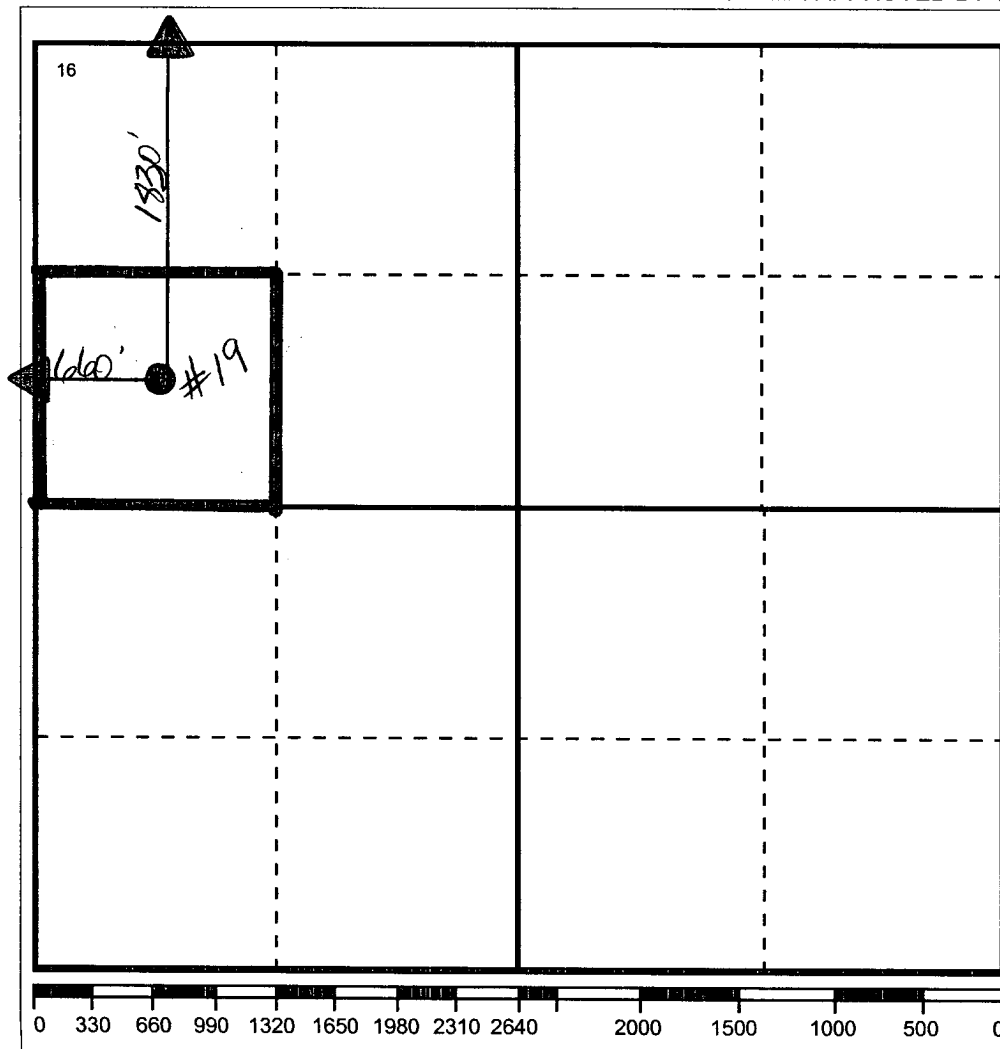
¹⁰ Surface Location

UI or lot no	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
E	31	21-S	37-E		1830'	NORTH	660'	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
¹² Dedicated Acre 40	¹³ Joint or Infill No	¹⁴ Consolidation Code	¹⁵ 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



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information
 contained herein is true and complete to the
 best of my knowledge and belief

Signature

Printed Name

Denise Pinkerton

Position

Regulatory Specialist

Date

2/13/2006


¹⁸ SURVEYOR CERTIFICATION

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 knowledge and
 belief.

Date Surveyed

 Signature & Seal of
 Professional Surveyor

Certificate No.

 The sender of this message has requested a read receipt. [Click here to send a receipt.](#)

Mull, Donna, EMNRD

From: Phillips, Dorothy, EMNRD
To: Mull, Donna, EMNRD
Cc:
Subject: RE: Financial Assurance Requirement
Attachments:

Sent: Wed 3/1/2006 9:08 AM

Donna, Paladin has 9 Inactive wells and it owns 61 wells and they are allowed to have only 2 inactive wells - I am asking Gail about this one also.

Pogo has 719 wells and are allowed 7 wells and they have 15 inactive and are purchasing 23 inactive from Arch but they do not appear on Jane's list. I have asked Gail about Pogo to see if she has contacted them. The system has been updated so that whenever an operator tries to do an operator change if they are out of compliance with Rule 40 a Warning appears that they are out of compliance and to contact me. I refer them either to Gail or Daniel. They let me know when to proceed with the operator change. However, Pogo submitted the name change before this was in place. Will let you know what Gail says. All the rest are okay.

From: Mull, Donna, EMNRD
Sent: Wednesday, March 01, 2006 7:42 AM
To: Phillips, Dorothy, EMNRD
Subject: Financial Assurance Requirement

Dorothy, These Operators have Intent to drill in District 1 for approval:

Trilogy Operating Inc, (21602)
 Range Operating New Mexico Inc. (227588)
 Marbob Energy Corp. (14049)
 Paladin Energy Corp. (164070)
 Energen Resources Corp (162928)
 Marathon Oil Co. (14021)
 BTA Oil Producers (3002)
 Northstar Operating Co. (152527)
 EverQuest Energy Corp (212929)
 Yates Petroleum Corp (35575)
 Arch Petroleum Inc, (962)
 Chevron USA Inc (4323)
 Pogo Producing Co. (17891)

Please check if the Financial Assurance Requirements are OK for these operators to drill. Thanks Donna