

District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-
May 27, 2

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

MAR 17 2008

☐ AMENDED REPC

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

HOBBS OCD

¹ Operator Name and Address CHEVRON U S A INC 15 SMITH ROAD MIDLAND, TEXAS 79705		² OGRID Number 4323
		³ API Number 30 - 025-35126
³ Property Code 29938	⁵ Property Name F.B DAVIS	⁶ Well No 9
⁹ Proposed Pool 1 LANGLIE MATTIX 7 RIVERS QUEEN GRAYBURG		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no F	Section 8	Township 23-S	Range 37-E	Lot Idn	Feet from the 1650	North/South line NORTH	Feet from the 2310	East/West line WEST	County LEA
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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
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Additional Well Information

¹¹ Work Type Code P	¹² Well Type Code O	¹³ Cable/Rotary	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3329'
¹⁶ Multiple NO	¹⁷ Proposed Depth 7288'	¹⁸ Formation GRAYBURG	¹⁹ Contractor	²⁰ Spud Date
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit	Liner Synthetic <input type="checkbox"/> Closed-Loop System <input checked="" type="checkbox"/>	mils thick	Clay <input type="checkbox"/>	Pit Volume _____ bbls
Drilling Method Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
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 RECOMPLETE THE SUBJECT WELL FROM THE TUBB POOL TO THE GRAYBURG RESERVOIR.

THE INTENDED PROCEDURE & CURRENT & PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL

Permit Expires 2 Years From Approval

Date Unless Drilling Underway

Plugback

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐ , a general permit ☐ , or an (attached) alternative OCD approved plan ☐ .

Signature *Denise Pinkerton*

Printed name Denise Pinkerton

Title Regulatory Specialist

E-mail Address leakejd@chevron.com

OIL CONSERVATION DIVISION

Approved by

Chris Williams

Title **OCD DISTRICT SUPERVISOR/GENERAL MANAGER**

Approval Date

MAR 24 2008

Expiration Date

Date 03-14-2008	Phone 432-687-7375	Conditions of Approval Attached <input type="checkbox"/>
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F. B. Davis # 9
Langlie Mattix Field
T23S, R37E, Section 8
Job: PB To Grayburg Formation, Acidize, And Frac

Procedure:

- 1. This procedure is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of 12/19/2007. Verify what is in the hole with the well file in the Eunice Field office. Discuss w/ WEO Engineer, Workover Rep, OS, ALS, and FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.***
2. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. 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.
3. 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 as required. Release TAC. POH with 2 7/8" tbg string and TAC. LD TAC.
4. PU and GIH with 4 3/4" MT bit and 2 7/8" work string to approximately 6250'. Reverse circulate well clean from 6250' using 8.6 PPG cut brine water. POH with work string and bit. LD bit.
5. PU and GIH with tbg-set CIBP on 2 7/8" work string to 6200'. Set CIBP at 6200'. Pressure test CIBP and 5 1/2" casing to 500 psi. POH with 2 7/8" work string and setting tool. LD setting tool.
6. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct GR/CBL/CCL from 6200' up to 100' above top of cement. Run log with 500 psi on casing. POH. Inspect logs for good cement bond from approximately 4100' up to 3400'. If bond does not appear to be good across proposed completion interval, discuss with Engineering before proceeding. GIH with 3 3/8" Predator casing guns and perforate from 3704-14', 3724-30', 3750-58', 3763-70', 3773-83', 3817-22', 3830-35', 3840-44', 3856-64', 3868-78', 3887-96', 3901-06', 3913-18', 3932-38', 3948-52', 3956-60', 3966-70', 3976-80', 3992-4000', and 4005-15' with 4 JSPF at 120 degree phasing, using 32 gram premium charges. POH. RD & release electric line unit. **Note: Use Schlumberger Platform Express Log dated 4/18/2001 for depth correlation.**
7. PU and GIH w/ 5 1/2" PPI pkr (with 12' element spacing) and SCV on 2 7/8" work string to approximately 4015'. Test tbg to 5500 psi while GIH.

8. MI & RU DS Services. Acidize perfs 3704-4015' with 4,000 gals anti-sludge 15% HCl acid * at a maximum rate **as shown below** and a maximum surface pressure of **3500 psi**. Spot acid across perfs 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
4005-15'	200 gals	½ BPM	4004-16'
3992-4000'	200 gals	½ BPM	3990-4002'
3976-80'	200 gals	½ BPM	3972-84'
3966-70'	200 gals	½ BPM	3962-74'
3956-60'	200 gals	½ BPM	3953-65'
3948-52'	200 gals	½ BPM	3941-53'
3932-38'	200 gals	½ BPM	3930-42'
3913-18'	200 gals	½ BPM	3910-22'
3901-06'	200 gals	½ BPM	3900-12'
3887-96'	200 gals	½ BPM	3886-98'
3868-78'	200 gals	½ BPM	3867-79'
3856-64'	200 gals	½ BPM	3854-66'
3840-44'	200 gals	½ BPM	3838-50'
3830-35'	200 gals	½ BPM	3825-37'
3817-22'	200 gals	½ BPM	3815-27'
3773-83'	200 gals	½ BPM	3772-84'
3763-70'	200 gals	½ BPM	3760-72'
3750-58'	200 gals	½ BPM	3748-60'
3724-30'	200 gals	½ BPM	3720-32'
3704-14'	200 gals	½ BPM	3703-15'

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

9. Release PPI pkr and PUH to approximately 3675'. Set pkr at 3675'. Fish SCV. 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.

10. Open well. Release PPI pkr. LD to 4050'. Set PPI pkr at 4050'. Pressure test casing from 4050' – 6200' to 2000 psi. Release PPI pkr. POH with tbg and PPI packer. LD PPI tool.
11. PU and GIH w/ 5 ½" Arrow-Set 10K pkr & On-Off tool w/ 2.25" "F" profile and 117 jts. of 3 ½" EUE 8R L-80 work string, testing to 8500 psi. Set pkr at approximately 3600'. Install frac head. Pressure annulus to 500 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.
12. MI & RU DS Services and Tracer-Tech Services (Mike Mathis (866) 595-3115). Frac well down 3 ½" tubing at **40 BPM** with 88,000 gals of YF125, 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 regular sand 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 at **6 BPM**
 Pump 1,000 gals 2% KCL water spacer at **20 BPM**
 Pump 14,000 gals YF125 pad containing 5 GPT J451 Fluid Loss Additive at **40 BPM**
 Pump 14,000 gals YF125 containing 0.5 PPG 16/30 mesh Jordan Sand & 5 GPT J451 FL Additive
 Pump 12,000 gals YF125 containing 1.5 PPG 16/30 mesh Jordan Sand
 Pump 12,000 gals YF125 containing 2.5 PPG 16/30 mesh Jordan Sand
 Pump 14,000 gals YF125 containing 3.5 PPG 16/30 mesh Jordan Sand
 Pump 16,000 gals YF125 containing 4.5 PPG 16/30 mesh Jordan Sand
 Pump 6,000 gals YF125 containing 5 PPG **resin-coated** 16/30 mesh CR1630 proppant.

 Flush to 3600' with 1,315 gals WF125. **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.**
13. Open well. Bleed pressure from well, if any. Release pkr. POH LD 3 ½" work string, on-off tool, and pkr.
14. PU and GIH with 4 ¾" MT bit on 2 7/8" work string to approximately 4300'. If fill is tagged above 4300', cleanout to 4300' using 8.6 PPG cut brine water and air unit if necessary. POH with 2 7/8" work string and bit. LD bit.
15. PU & GIH with 5 ½" pkr on 2 7/8" work string to 3600'. Set pkr at 3600'. 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 4300' up to 3300'. POH. RD & release electric line unit. **Note: Correlate logs and run flat with Baker Atlas GR/CBL/CCL Log conducted in Step # 6.**
16. Release pkr. POH LD 2 7/8" work string and pkr.

17. 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, 12 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 118 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3650', with EOT at 4115' and SN at 4080'.
18. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release pulling unit.
19. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH

12/19/2007

Well **F. B. Davis # 9**Field **Teague North**Reservoir **Tubb****Location:**

1650' FNL & 2310' FWL
 Section 8
 Township 23S
 Range 37E
 County Lea State NM

Elevations:

GL 3329'
 KB 3344'
 DF 3343'

Current
Wellbore Diagram

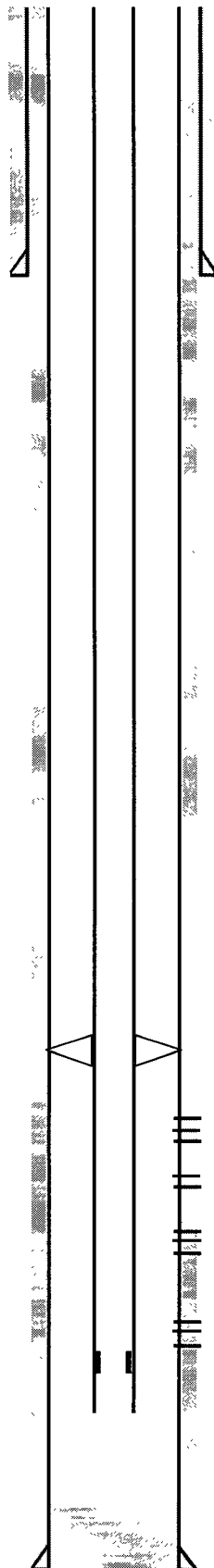
Well ID Info:

Chevno HD2101
 API No 30-025-35126
 L5/L6 UCU820600
 Spud Date 3/27/01
 Compl Date 5/4/01

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	15 00
201	Jts 2 7/8" EUE 8R J-55 Tbg	6222 39
	TAC	2 70
5	Jts 2 7/8" EUE 8R J-55 Tbg	156 75
1	Jt 2 7/8" EUE 8R J-55 IPC Tbg	31 43
	SN	1 10
1	Jt 2 7/8" EUE 8R J-55 Tbg	30 14
	Pinned Collar	0 50
208	Bottom Of String >>	6460.01



Surf. Csg: 8 5/8", 24#, K-55
 Set: @ 1183' w/ 640 sks
 Hole Size: 12 1/4"
 Circ: Yes TOC: Surface
 TOC By: Circulated

Perfs: **Status:**
 6254-60' Tubb - Open
 6282-84' Tubb - Open
 6310-16' Tubb - Open
 6350-54' Tubb - Open
 6384-88' Tubb - Open

COTD: 7200'
 PBTD: 7200'
 TD: 7288'

Updated: 12/18/2007

By: A M Howell

Prod. Csg: 5 1/2", 17#, K-55 & L-80
 Set: @ 7288' w/ 1680 sks
 Hole Size: 7 7/8"
 Circ: Yes TOC: Surface
 TOC By: Circulated

Well **F. B. Davis # 9**Field **Teague North**Reservoir **Tubb****Location:**

1650' FNL & 2310' FWL
 Section 8
 Township 23S
 Range 37E
 County Lea State NM

Elevations:

GL 3329'
 KB 3344'
 DF 3343'

Proposed
Wellbore Diagram

Well ID Info:

Chevno HD2101
 API No 30-025-35126
 L5/L6 UCU820600
 Spud Date 3/27/01
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This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	15 00
118	Jts 2 7/8" EUE 8R J-55 Tbg	3658 00
	TAC	2 70
12	Jts 2 7/8" EUE 8R J-55 Tbg	372 00
1	Jt 2 7/8" EUE 8R J-55 IPC Tbg	31 43
	SN	1 10
	2 7/8" x 4' Perf Tbg Sub	4 10
1	Jt 2 7/8" EUE 8R J-55 Tbg	30 14
	Bullplug	0 50
132	Bottom Of String >>	4114.97

Surf. Csg: 8 5/8", 24#, K-55
Set: @ 1183' w/ 640 sks
Hole Size: 12 1/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Perfs:	Status:
3704-14'	Grayburg - Open
3724-30'	Grayburg - Open
3750-58'	Grayburg - Open
3763-70'	Grayburg - Open
3773-83'	Grayburg - Open
3817-22'	Grayburg - Open
3830-35'	Grayburg - Open
3840-44'	Grayburg - Open
3856-64'	Grayburg - Open
3868-78'	Grayburg - Open
3887-96'	Grayburg - Open
3901-06'	Grayburg - Open
3913-18'	Grayburg - Open
3932-38'	Grayburg - Open
3948-52'	Grayburg - Open
3956-60'	Grayburg - Open
3966-70'	Grayburg - Open
3976-80'	Grayburg - Open
3992-4000'	Grayburg - Open
4005-15'	Grayburg - Open

CIBP @ 6200'
 (No cmt on top)

Perfs:	Status:
6254-60'	Tubb - Open
6282-84'	Tubb - Open
6310-16'	Tubb - Open
6350-54'	Tubb - Open
6384-88'	Tubb - Open

COTD: 6200'
PBTD: 6200'
TD: 7288'

Prod. Csg: 5 1/2", 17#, K-55 & L-80
Set: @ 7288' w/ 1680 sks
Hole Size: 7 7/8"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Updated: 12/18/2007

By: A M Howell

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1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-025-35126	2 Pool Code 37240	3 Pool Name LANGLIE MATTIX 7 RIVERS QUEEN GRAYBURG
4 Property Code 29938	5 Property Name F.B. DAVIS	6 Well Number 9
7 OGRID No. 4323	8 Operator Name CHEVRON U.S.A. INC.	9 Elevation 3329'

10 Surface Location

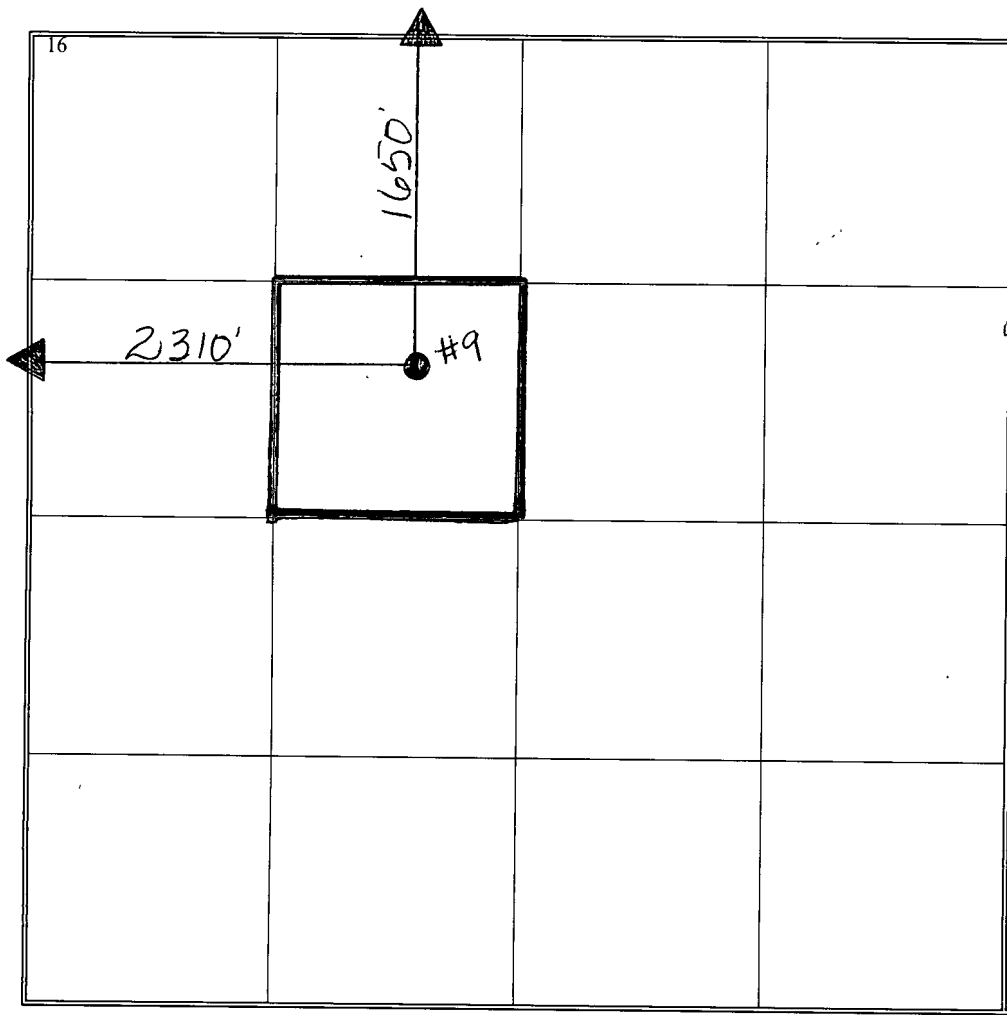
UL or lot no. F	Section 8	Township 23-S	Range 37-E	Lot Idn	Feet from the 1650	North/South line NORTH	Feet from the 2310	East/West line WEST	County LEA
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres 40	13 Joint or Infill	14 Consolidation Code	15 Order No.
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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.

16		17 OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division</i> Signature: <u>Denise Pinkerton</u> Date: 03-14-2008 Printed Name: DENISE PINKERTON REGULATORY SPECIALIST
		18 SURVEYOR CERTIFICATION <i>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</i> Date of Survey Signature and Seal of Professional Surveyor Certificate Number