

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  
**RECEIVED**  
MAR 10 2011 Oil Conservation Division  
1220 South St. Francis Dr.  
HOBBSOCD Santa Fe, NM 87505

Form C-101  
June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address CHEVRON U.S.A. INC. 15 SMITH ROAD MIDLAND, TEXAS 79705		<sup>2</sup> OGRID Number 4323
		<sup>3</sup> API Number 30 - 025-34974
<sup>3</sup> Property Code 29938	<sup>5</sup> Property Name F.B. DAVIS	<sup>6</sup> Well No. 7
<sup>9</sup> Proposed Pool 1 LANGLIE MATTIX; SEVEN RIVERS QUEEN GRAYBURG		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location									
UL or lot no. G	Section 8	Township 23-S	Range 37-E	Lot Idn	Feet from the 1650'	North/South line NORTH	Feet from the 1650'	East/West line EAST	County LEA

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South lin	Feet from the	East/West line	County

**Additional Well Information**

<sup>11</sup> Work Type Code PLUGBACK	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary	<sup>14</sup> Lease Type Code S P	<sup>15</sup> Ground Level Elevation 3324' GL
<sup>16</sup> Multiple NO	<sup>17</sup> Proposed Depth 7650'	<sup>18</sup> Formation GRAYBURG	<sup>19</sup> Contractor	<sup>20</sup> Spud Date

**<sup>21</sup> Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
NO CHANGE					

<sup>22</sup> 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 INTO THE LANGLIE MATTIX 7 RIVERS QUEEN GRAYBURG FORMATION.

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE, WELLBORE DIAGRAM, C-102 PLAT, & C-144 PIT INFORMATION.

Permit Expires 2 Years From Approved  
Date Unless Drilling Underway  
Plugback

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:  
DENISE PINKERTON

Title:  
REGULATORY SPECIALIST

E-mail Address:  
leakejd@chevron.com

Date:  
03-08-2011

Phone:  
432-687-7375

**OIL CONSERVATION DIVISION**

Approved by:

Title:

Approval Date:

MAY 18 2011

Expiration Date:

Conditions of Approval Attached ☐

# WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-34974	<sup>2</sup> Pool Code 37240	<sup>3</sup> Pool Name LANGLIE MATTIX; 7 RIVERS QUEEN GRAYBURG
<sup>4</sup> Property Code	<sup>5</sup> Property Name F.B. DAVIS	<sup>6</sup> Well Number 7
<sup>7</sup> OGRID No. 4323	<sup>8</sup> Operator Name CHEVRON U.S.A. INC.	<sup>9</sup> Elevation 3324' GL

## <sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	8	23S	37E		1650	NORTH	1650	EAST	LEA

## <sup>11</sup> 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

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.

<sup>16</sup>	<sup>17</sup> <b>OPERATOR CERTIFICATION</b> 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. Signature: <i>Denise Pinkerton</i> Date: 3-08-2011 Printed Name: DENISE PINKERTON REGULATORY SPECIALIST E-mail Address: leakejd@chevron.com
	<sup>18</sup> <b>SURVEYOR CERTIFICATION</b> 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. Date of Survey Signature and Seal of Professional Surveyor:
	Certificate Number

**F. B. Davis # 7**  
**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 3/4/2011. 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 test line according to the type of pipe. All polypipe (SDR7 and SDR11) will be tested to 1 ½ times the derated poly working pressure. All steel lines will be tested to 1 ½ times the working pressure of the lowest pressure rated component of the flowline. If a leak is found, contact Donnie Ives for repair/replacement. If test is good, bleed off pressure and **open valve** at header. This test must be charted for 30 minutes and the chart turned in to Donnie Ives. Also, 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 LD 2 7/8" tbg string and TAC.
4. PU and GIH with 4 ¾" MT bit and 2 7/8" work string to approximately 6225'. POH with work string and bit. LD bit.
5. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and set CIBP at 6200'. POH. GIH and dump bail 35' of cement on top of CIBP at 6200'. POH. GIH and set CIBP at 5550'. POH. Fill casing with 8.6 PPG cut brine water. Pressure test casing and CIBP to 500 psi. GIH and conduct GR/CBL/CCL from PBTD up to up to 100' above top of cement. Run log with with 500 psi on casing. POH. Inspect log for good cement bond from approximately 4100' up to 3500'. If bond does not appear to be good across proposed completion interval, discuss with Engineering before proceeding. GIH with 3 3/8" RHSC Gunslinger casing guns (0.42" EH & 47" penetration) and perforate from 3711-17', 3719-23', 3728-32', 3774-82', 3807-16', 3821-27', 3834-42', 3850-54', 3860-66', and 3894-3902' with 4 JSPF at 120 degree phasing, using 25 gram premium charges. POH. GIH and dump bail 35' of cement on top of CIBP at 5550'. POH. RD & release electric line unit. **Note: Use Schlumberger Platform Express GR/CNL Log dated 4/30/2000 for depth correlation.**
6. PU and GIH w/ 5 ½" PPI pkr (with 12' element spacing) and SCV on 2 7/8" work string to approximately 3910'. Test tbg to 5500 psi while GIH.

7. MI & RU DS Services. Acidize perms 3733-3909' with 2,400 gals anti-sludge 15% HCl acid \* at a maximum rate **as shown below** and a maximum surface pressure of **3500 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
3900-09'	200 gals	½ BPM	3899-3911'
3880-89'	200 gals	½ BPM	3879-91'
3870-76'	200 gals	½ BPM	3866-78'
3860-64'	200 gals	½ BPM	3856-68'
3845-53'	200 gals	½ BPM	3844-56'
3834-37'	200 gals	½ BPM	3830-42'
3818-24'	200 gals	½ BPM	3816-28'
3800-04'	200 gals	½ BPM	3798-3810'
3783-88'	200 gals	½ BPM	3780-92'
3764-68'	200 gals	½ BPM	3762-74'
3756-60'	200 gals	½ BPM	3750-62'
3733-43'	200 gals	½ BPM	3732-44'

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 perms. 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 3700'. Set pkr at 3700'. 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 perms 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" Arrow-Set 10K pkr & On-Off tool w/ 2.25" "F" profile and 97 jts. of 3 ½" EUE 8R L-80 work string, testing to 8500 psi. Set pkr at approximately 3000'. 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 ProTechnics Services. 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 3680' with 1,777 gals WF125. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services and ProTechnics Services. **Leave well SI overnight.**

12. Open well. Bleed pressure from well, if any. Release pkr. POH LD 3 ½" work string, on-off tool, and pkr.
13. 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 or bailer 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 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 # 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, 10 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 3670', with EOT at 4050' and SN at 4015'.
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: **F. B. Davis # 7**Field: **Teague North**Reservoir: **Blinebry & Tubb (DHC)****Location:**

1650' FNL & 1650' FEL  
 Section: 8 Unit Letter: G  
 Township: 23S  
 Range: 37E  
 County: Lea State: NM

**Elevations:**

GL: 3324'  
 KB: 3338'  
 DF: 3337'

**Current**  
**Wellbore Diagram**

**Well ID Info:**

Chevno: BY6857  
 API No: 30-025-34974  
 L5/L6: UCMK90300  
 Spud Date: 4/4/2000  
 Compl. Date: 5/12/2000

**Surf. Csg:** 8 5/8", 24#, K-55  
**Set:** @ 1197' w/ 660 sks  
**Hole Size:** 12 1/4"  
**Circ:** Yes **TOC:** Surface  
**TOC By:** Circulated

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	14.00
178	Jts. 2 7/8" EUE 8R J-55 Tbg	5514.00
	TAC	2.70
23	Jts. 2 7/8" EUE 8R J-55 Tbg	716.00
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
203	Bottom Of String >>	6313.97

Perfs:	Status:
5612-16'	Blinebry - Open
5642-44'	Blinebry - Open
5652-56'	Blinebry - Open
5678-82'	Blinebry - Open
5714-18'	Blinebry - Open
5736-42'	Blinebry - Open
5794-5806'	Blinebry - Open
5850-52'	Blinebry - Open
5882-86'	Blinebry - Open

6224-26'	Tubb - Open
6252-54'	Tubb - Open
6280-92'	Tubb - Open
6298-6300'	Tubb - Open
6310-24'	Tubb - Open
6338-56'	Tubb - Open
6362-72'	Tubb - Open

**COTD:** 7500'  
**PBTD:** 7549'  
**TD:** 7650'

Updated: 3/4/2011

By: A. M. Howell

**Prod. Csg:** 5 1/2", 17# K-55 & L-80  
**Set:** @ 7650' w/ 3345 sks  
**Hole Size:** 7 7/8"  
**Circ:** No **TOC:** 1204'  
**TOC By:** Temperature Survey

Well: **F. B. Davis # 7**Field: **Langlie Mattix**Reservoir: **Grayburg****Location:**

1650' FNL & 1650' FEL  
 Section: 8 Unit Letter: G  
 Township: 23S  
 Range: 37E  
 County: Lea State: NM

**Elevations:**

GL: 3324'  
 KB: 3338'  
 DF: 3337'

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:**

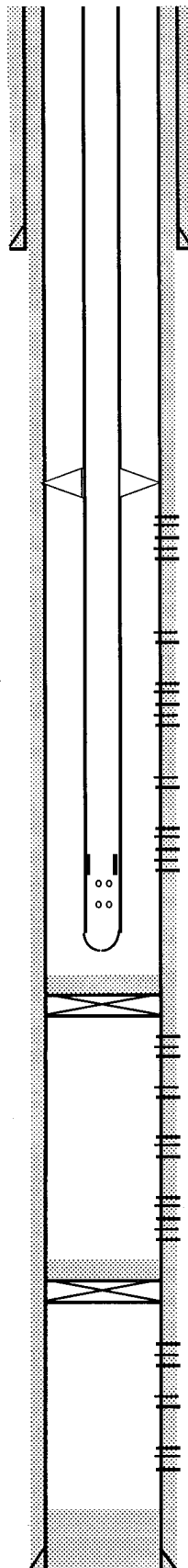
#Jts:	Size:	Footage
	KB Correction	14.00
118	Jts. 2 7/8" EUE 8R J-55 Tbg	3658.00
	TAC	2.70
10	Jts. 2 7/8" EUE 8R J-55 Tbg	310.00
1	Jt. 2 7/8" EUE 8R J-55 IPC Tbg	31.43
	SN	1.10
	2 7/8" x 4' Perf Tbg Sub	4.10
1	Jt. 2 7/8" EUE 8R J-55 Tbg	30.14
	Bullplug	0.50
130	Bottom Of String >>	4051.97

**CIBP @ 5550'**

(35' cmt on top)

**CIBP @ 6200'**

(35' cmt on top)

**COTD: 5515'****PBTD: 5515'****TD: 7650'****Updated: 3/4/2011****Proposed  
Wellbore Diagram****By: A. M. Howell****Well ID Info:**

Chevno: BY6857  
 API No: 30-025-34974  
 L5/L6: UCMK90300  
 Spud Date: 4/4/2000  
 Compl. Date: 5/12/2000

**Surf. Csg: 8 5/8", 24#, K-55****Set: @ 1197' w/ 660 sks****Hole Size: 12 1/4"****Circ: Yes TOC: Surface****TOC By: Circulated****Perfs:**

3733-43' Grayburg - Open  
 3756-60' Grayburg - Open  
 3764-68' Grayburg - Open  
 3783-88' Grayburg - Open  
 3800-04' Grayburg - Open  
 3818-24' Grayburg - Open  
 3834-37' Grayburg - Open  
 3845-53' Grayburg - Open  
 3860-64' Grayburg - Open  
 3870-76' Grayburg - Open  
 3880-89' Grayburg - Open  
 3900-09' Grayburg - Open

**Status:****Perfs:**

5612-16' Blinbry - Open  
 5642-44' Blinbry - Open  
 5652-56' Blinbry - Open  
 5678-82' Blinbry - Open  
 5714-18' Blinbry - Open  
 5736-42' Blinbry - Open  
 5794-5806' Blinbry - Open  
 5850-52' Blinbry - Open  
 5882-86' Blinbry - Open

**Status:**

6224-26' Tubb - Open  
 6252-54' Tubb - Open  
 6280-92' Tubb - Open  
 6298-6300' Tubb - Open  
 6310-24' Tubb - Open  
 6338-56' Tubb - Open  
 6362-72' Tubb - Open

**Prod. Csg: 5 1/2", 17# K-55 & L-80****Set: @ 7650' w/ 3345 sks****Hole Size: 7 7/8"****Circ: No TOC: 1204'****TOC By: Temperature Survey**