DATE 06/14/13	SUSPENSE	ENGINEER DG	LOGGED IN 06/17/2013	TYPE WFX -915	APP NO. pAXK1316842464

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-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

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

~~API not yet issued~~
Chevron USA Inc
VGSAU #247
API 30-025-40994

[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 R-4442-G

RECEIVED OCD
2013 JUN 14 P 2:10

[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.

Carolyn Haynie	Carolyn Haynie	NM Petro Eng Tech Assistant	June 10-13
Print or Type Name	Signature	Title	Date

chay@chevron.com
e-mail Address

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-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: X Secondary Recovery _____ Pressure Maintenance _____ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No

II. OPERATOR: **CHEVRON U.S.A., INC.**

ADDRESS: **15 SMITH ROAD; MIDLAND, TX 79705**

CONTACT PARTY: **CAROLYN HAYNIE** PHONE: **432-687-7261**

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? X Yes _____ No
If yes, give the Division order number authorizing the project: R-4442-G

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. ATTACHED

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. ATTACHED

VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected; **2,000 BWPD and 4,000 MCFPD**
2. Whether the system is open or closed; **CLOSED**
3. Proposed average and maximum injection pressure; **1500 PSI, when injecting Water and, 2200 PSI when injection CO2.**
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, **CO2 for Injection will either be purchased or VGSAU produced gas that is stripped of NGLs & Re-injected.**
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). **Injection is not for disposal purposes, but for Oil production enhancement.**

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. **Grayburg San Andres formation, Proposed Injection Zone, 3902' – 5020'.**

IX. Describe the proposed stimulation program, if any. **The Injection wells will be acid stimulated w/15% HCL.**

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. **Attached, (Hobbs News Sun).**

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: **CAROLYN HAYNIE** TITLE: **Petro Eng. Tech Assistant**

SIGNATURE: Carolyn Haynie DATE: 6-10-13

E-MAIL ADDRESS: chay@chevron.com If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Chevron

Carolyn Haynie
Petroleum Engineering
Technical Assistant

MidContinent/Alaska SBU
Chevron North America
Exploration and Production
Company
15 Smith Road
Midland, TX 79705
Tel 432-687-7261
Fax 432-687-7703
chay@chevron.com

June 10, 2013

New Mexico Oil Conservations Division
1220 South San Francis Drive
Santa Fe, New Mexico 87504

RE: Application for Authorization to Inject
OCD Form C-108
Order R-4442-G
Vacuum Grayburg San Andres
Lea, County, New Mexico

Chevron U.S.A. Inc., respectfully requests administrative approval to replace the VGSAU # 47 disposal well, with the VGSAU # 247. Chevron plans to drill the well as a new WAG injector for water, CO2, and produced gas into the Grayburg San Andres formations from approximately 3902' to 5020'. A map is attached which shows the surface and bottom hole location in comparison to the VGSAU 47. The VGSAU # 47 failed to pass the MIT test, and was therefore plugged and abandoned on 3-7-2013.

Please reference the attached email conversation, dated Feb 27, 2013, between myself and Will Jones concerning the Area Of Review (AOR). The AOR has not changed since the VGSAU # 47 permit was issued on 1/12/2010, and there have been no additional wells drilled within the ½ mile AOR since that date. The AOR involves a portion of sections 1 & 2, T18S, R34E, operated as to all depths by Chevron, a portion of section 36, T17S, R34E, where the San Andres is operated by Chevron, and a portion of section 35, T17S, R34E, where the San Andres is operated by the McGowan Working Interest partners. So, McGowan will be the only offset operator to be notified.

The hearing Order that permitted CO2 injection, and also permitted re-injection of recycled produced gas, is R-4442-G, paragraphs 5 & 6.

Attached is an OCD form C-108 and the information relative to the proposed expansion. A copy of the legal notice submitted to the Hobbs News-Sun is included in this package. The enclosed map highlights the location of the referenced well in relation to the offset operations.

If additional information is required, please contact me at (432-687-7261), or the project engineer, Ryan Warmke, at (432-687-7452).

Sincerely,

Carolyn Haynie

NM PE Technical Assistant

Side 1

INJECTION WELL DATA SHEET

OPERATOR: **CHEVRON U.S.A., INC.**

WELL NAME & NUMBER: **VACUUM GRAYBURG SAN ANDRES UNIT #247**

WELL LOCATION: **1800' FNL & 145' FEL** | **H** | 2 | T18S | R34E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 14-3/4" Casing Size: 11-3/4"

Cemented with: 1300 sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulation

Intermediate Casing

Hole Size: 11" Casing Size: 8-5/8"

Cemented with: 750 sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulation

Production Casing

Hole Size: 7-7/8" Casing Size: 5-1/2"

Cemented with: 1150 sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulation

Total Depth: 5300'

Injection Interval

(TVD) 4290' feet to 4850'

(Perforated)

INJECTION WELL DATA SHEET

Tubing Size: 2-3/8" Lining Material: Fiberglass

Type of Packer: Arrowset Mechanical Set

Packer Setting Depth: 4280'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? X Yes _____ No

   If no, for what purpose was the well originally drilled? _____

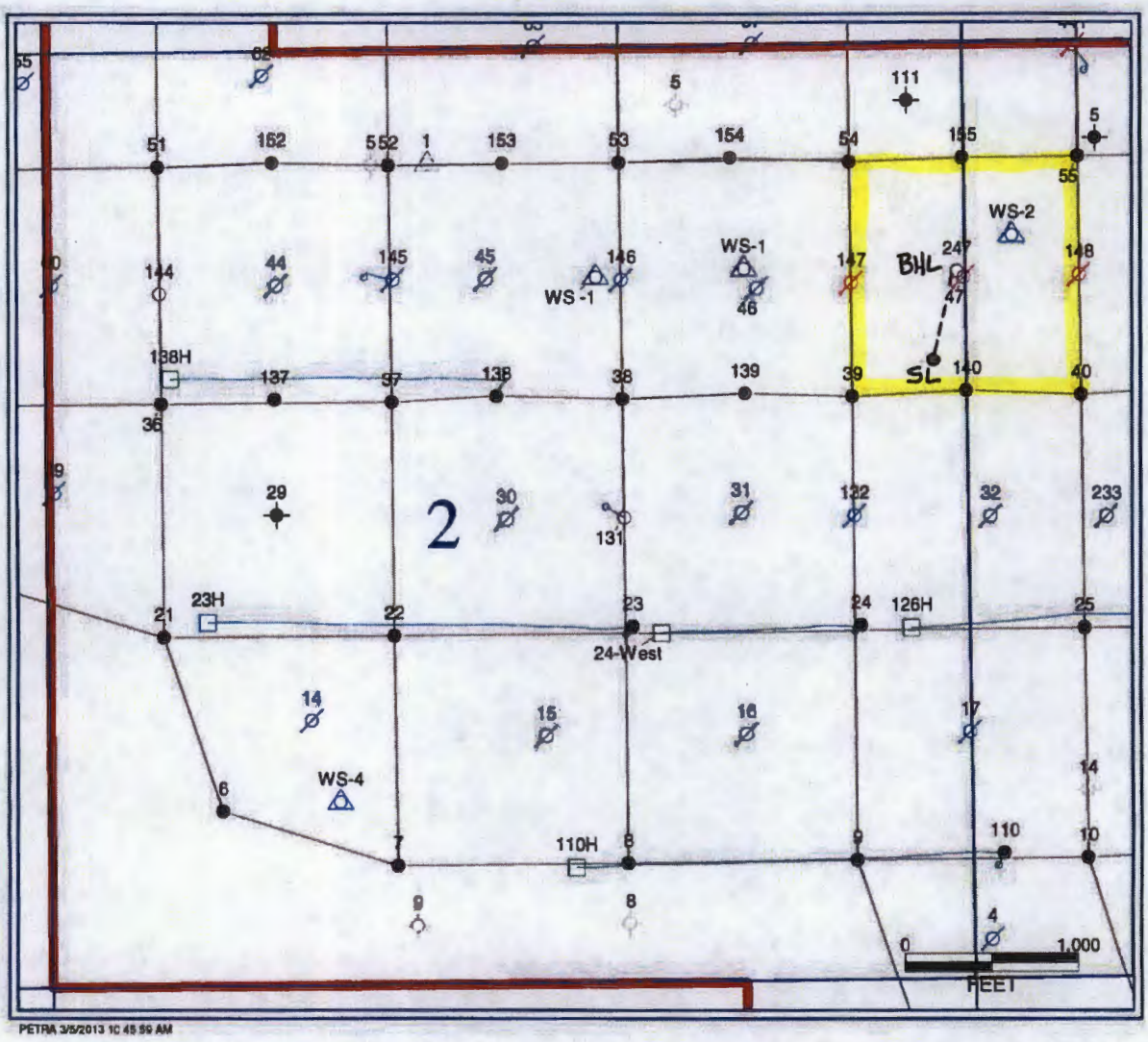
2. Name of the Injection Formation: SAN ANDRES

3. Name of Field or Pool (if applicable): VACUUM (GRAYBURG SAN ANDRES)

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. NO

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

   GLORIETA 5,900'



VGSAU 247WI PLAT
SEC. 2, T18S R34E
SCALE - 1" = 1000'
LEA CO., N.M.

SURFACE LOCATION (SL) -
1800' FNL 145' FEL

BOTTOM HOLE LOCATION (BHL) -
1320' FNL 100' FEL

S.M. INGRAM 3/5/13

VGSAU 247 WI WELLBORE DIAGRAM

Created:	02/20/13	By:	Chay	Well #:	247	St. Lse:	State
Updated:		By:		API	30-025-40994		
Lease:	Vacuum Grayburg San Andres			Unit Ltr.:	H	Section:	2
Field:	Vacuum Grayburg San Andres			TSHP/Rng:	T18S / R34E		
Surf. Loc.:	1800' FNL & 145' FEL			Unit Ltr.:	H	Section:	2
Bot. Loc.:	1320' FNL & 100' FEL			TSHP/Rng:	T18S / R34E		
County:	Lea	St.:	NM	Directions:			
Status:	New Injection Well			Chevno:			

PROPOSED WELLBORE

Proposed

Surface Casing

Size:	11-3/4", H-40
Wt., Grd.:	42#
Depth:	1525'
Sxs Cmt:	1300 sxs
Circulate:	Yes
TOC:	Surface
Hole Size:	14-3/4"

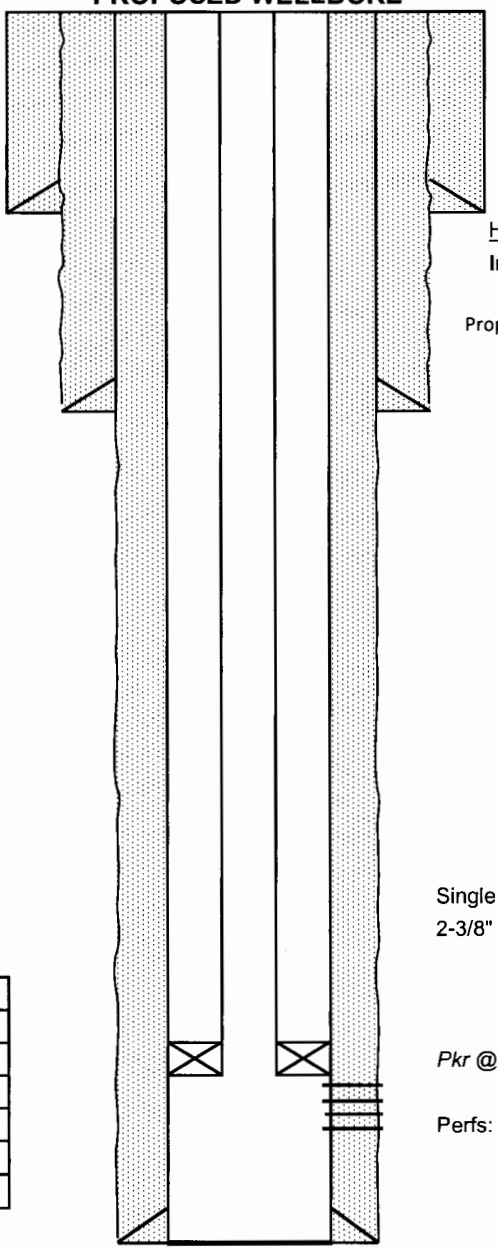
Intermediate Casing

Size:	8-5/8", J-55
Wt., Grd.:	32#
Depth:	3200'
Sxs Cmt:	750 sxs
Circulate:	
TOC:	Surface
Hole Size:	11"

Production Casing

Size:	5-1/2", J-55
Wt., Grd.:	17#
Depth:	5300'
Sxs Cmt:	1150 sxs
Circulate:	
TOC:	Surface
Hole Size:	7-7/8"

Formation Tops	
T/Salt	
B/Salt	
T/Yates	
T/Queen	
T/San Andres	
T/Glorieta	



KB:
DF:
GL: 4003'
Ini. Spud:
Ini. Comp.:

History:

Initial Completion:

Proposed Spud date: July, 2013

Single string
2-3/8" Fiberlined Tubing

Pkr @ 4280'

Perfs: 4290' - 4850'

TD: 5300' *Proposed*

Division Director additional information requests:

1. **New well is included in an accepted "acid gas contingency" plan.**

   Yes, this new well will be included in the H2S Contingency Plan, (copy available in required).

2. **Automatic shutoff in the well, in the wellhead, or near the wellhead that would stop outflow of gas if something happened to the well.**

   Chevron installs check valves at each wellhead which provides automatic shutoff service.

3. **Some documentation as to the automation (scada system) being used on the VGSAU. This system needs to be capable of continuously measuring tubing and casing pressures and injection rates. The new permit may state this data to be retained and available to Hobbs district upon request.**

   Injector will be tied into Chevron's SCADA system and routinely monitored.

4. **The MIT schedule may be more frequent than the normal 5 years – depending on Hobbs requirements**

   Chevron currently perform annual MIT testing on injectors

Haynie, Carolyn (CHaynie) [Kelly Services]

From: Jones, William V., EMNRD [William.V.Jones@state.nm.us]
Sent: Wednesday, February 27, 2013 10:48 AM
To: Haynie, Carolyn (CHaynie) [Kelly Services]
Cc: Gonzales, Elidio L, EMNRD; Goetze, Phillip, EMNRD; Ezeanyim, Richard, EMNRD
Subject: Chevron's VGSAU - planned redrill of injection well

Carolyn,
Instead of doing a complete new Area of Review search, just search for additional wells in the AOR (to at least that depth) that were drilled AFTER the last permit was issued for the well being abandoned. Include a statement as to what has changed in the AOR – include the plugging detail for the well being abandoned. If new wells were drilled or plugged, list those and their cement/casing details (well bore diagrams for the plugged wells).

As far as notice goes, if the ½ mile AOR extends out of the VGSAU, then notify the operators within the portion of the circle extending out of the AOR. So notice should be done as always.

So the C-108 should be pretty standard with exception of only listing of AOR wells that were NOT already listed in the past.

Since you are doing an "S" shaped well, please send a schematic or some drawings of that.

A couple of new wrinkles the Division Director has asked for from OXY and probably will want from Chevron:

a. We need a statement that the new well is included in an accepted "acid gas contingency" plan. So if unsure, please run this by the environmental bureau here in Santa Fe ASAP.
b. We need some sort of automatic shutoff in the well, in the wellhead, or near the wellhead that would stop outflow of gas if something happened to the well. You probably have that covered, but let us know in the application.
c. Some documentation as to the automation (scada system) being used on the VGSAU. This system needs to be capable of continuously measuring tubing and casing pressures and injection rates. The new permit may state this data to be retained and available to Hobbs district upon request.
d. The MIT schedule may be more frequent than the normal 5 years – depending on Hobbs requirements.
e. Anything else that is consistently required for other "acid gas" injection or disposal operations.

I didn't review the hearing order for this project, so please also check to ensure the hearing order(s) that permitted CO2 injection, also permitted re-injection of re-cycled produced gas (if that is happening). If not, then we may need to talk as soon as possible.

Thank You!

Will

From: Haynie, Carolyn (CHaynie) [Kelly Services] [mailto:CHAY@chevron.com]
Sent: Tuesday, February 26, 2013 10:15 AM
To: Jones, William V., EMNRD
Cc: Ingram, Scott (ScottIngram); Brown, Paul T (PaulBrown); Warmke, RYAN
Subject: FW: PROJECT

Hi Will,

I have a question for you.

Chevron has VGSAU # 47 as an approved CO2 Injector, (R-4442-C thru R-4442-G) and we were unable to get a plug to seat in a profile nipple, (partially because this well has the tubing cemented in place), so we were unable to get a MIT test.

Since this well wasn't a good injector, (had a low injection rate), Chevron would like to P&A this well and drill a replacement injection well. The replacement well will be the VGSAU 247, and the bottom hole location is planned for ~50' NW of the VGSAU 47. The surface location will be about 1,000' from the 47, because of access issues. The injection interval will again be the Grayburg San Andres, with gross of 4270' to 4850'. The permitted injection interval for the VGSAU 47, and other VGSAU injectors, is the "Unitized Formation". Through OCD order R-4442-C dated 5/30/2008, the definition of the Unitized Formation was amended, vertically expanded, as shown below. Initially the VGSAU 247 will be completed, grossly, as the VGSAU 47 is now, between ~4270' and 4850' TVD, however, to avoid unnecessary restrictions later, we desire its permitted interval to read as all the other VGSAU injectors do, the Unitized Formation.

IT IS THEREFORE ORDERED THAT:

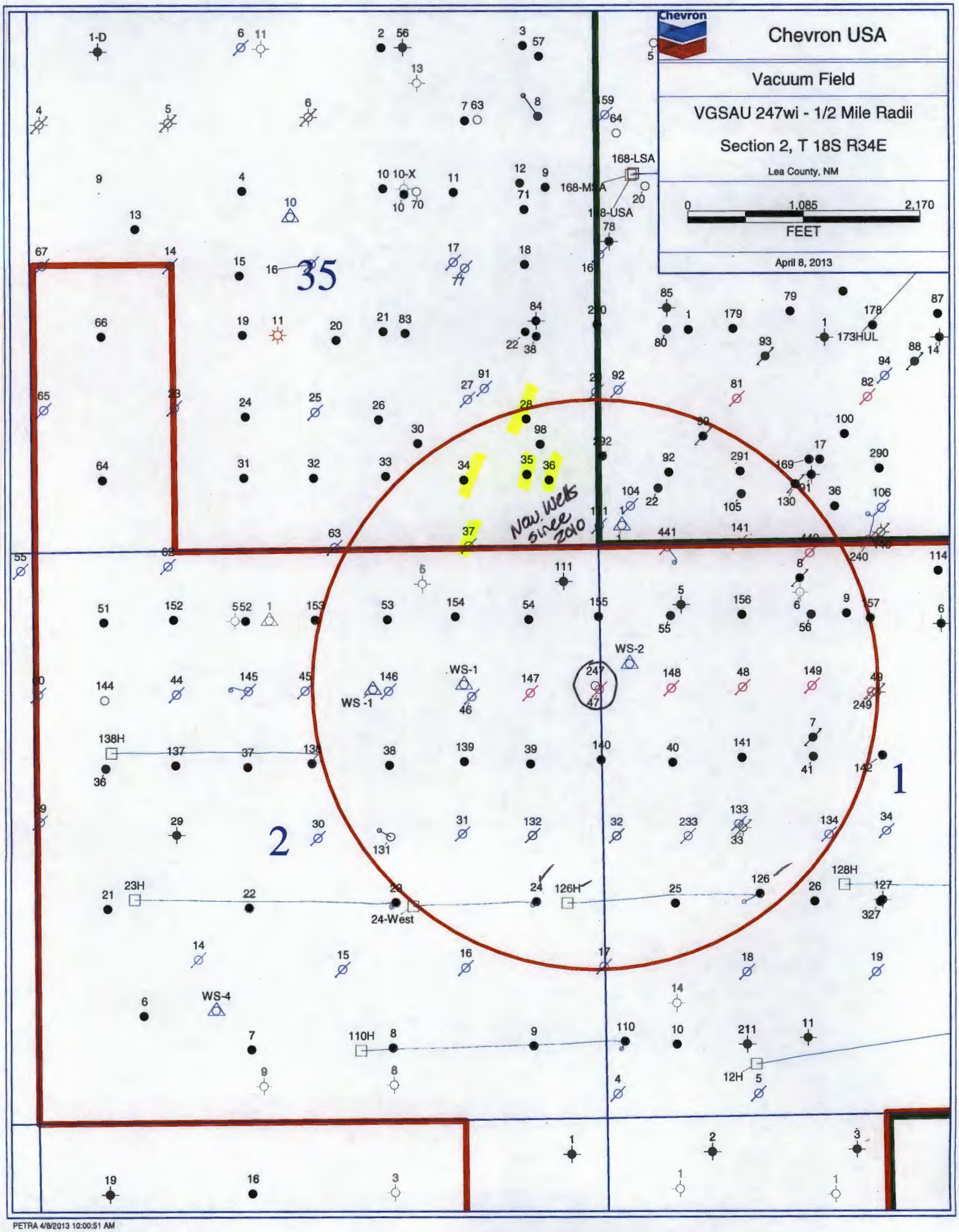
(1) The application of Chevron U.S.A., Inc. ("operator") for approval of an amendment to the Unit Agreement for the Development and Operation of the Vacuum Grayburg- San Andres Unit Area to expand the vertical limits of the Unitized Formation is hereby granted.

(2) The Unitized Formation of the Vacuum Grayburg-San Andres Unit is hereby extended to include portions of the Grayburg and San Andres Formations found between the stratigraphic equivalents of the depths of 3,902 feet and 5,020 feet on the Welex Acoustics Velocity Log, dated February 22, 1965, run in Texaco's New Mexico "M" State Well No. 8, located 330 feet from the North line and 1880 feet from the West line of Section 1, Township 18 South, Range 34 East, Lea County, New Mexico.

Can you tell me what all you will need in the C108 Application from us to get the approval for the VGSAU 247? Since the bottom hole location will be essentially the same as the # 47, ***will you need a complete C108 with all the offset operators, ½ mile well list and everything****? The plugging of the VGSAU # 47 will be fairly soon, so if you don't need everything for this project, it will be helpful for faster approval for this project.*

Thanks!

Carolyn Haynie
Chevron U.S.A. Inc.
New Mexico PE TA
For Eunice, Vacuum, Dollarhide, And Facilities
Room 2242A
Midland, TX
432-687-7261



PETRA 4/8/2013 10:00:51 AM

VGSAU 247 Proposed Injection Well

Half Mile Radii Offset wells

Well	Operator	API	Status	Lease	Pool	Pool #	Unit Letter	Sec	Location	Twnshp	Rng	Co	TD
State 35 Unit # 28	McGowan Working Partners, Inc.	30-025-33417	Active Oil	Vacuum Grayburg San Andres	Vacuum; Grayburg-San Andres	62180	P	35	1170' FSL & 660' FEL	17S	34E	LEA	5000'
State 35 Unit # 34	McGowan Working Partners, Inc.	30-025-30617	Active Oil	Vacuum Grayburg San Andres	Vacuum; Grayburg-San Andres	62180	P	35	620' FSL & 1250' FEL	17S	34E	LEA	4800'
State 35 Unit # 35	McGowan Working Partners, Inc.	30-025-02221	Active Oil	Vacuum Grayburg San Andres	Vacuum; Grayburg-San Andres	62180	P	35	660' FSL & 660' FEL	17S	34E	LEA	4552'
State 35 Unit # 36	McGowan Working Partners, Inc.	30-025-20780	Active Oil	Vacuum Grayburg San Andres	Vacuum; Grayburg-San Andres	62180	P	35	660' FSL & 560' FEL	17S	34E	LEA	10,400'
State 35 Unit # 37	McGowan Working Partners, Inc.	30-025-28062	Active Injection	Vacuum Grayburg San Andres	Vacuum; Grayburg-San Andres	62180	P	35	10' FSL & 1210' FEL	17S	34E	LEA	4800'

5 new wells + prior AOR wells for VGSAU #47 (API-025-24365) – not in original AOR

State 35 Unit # 28

Created:	05/22/13	By: CHAY	Well #:	28	St. Lse:
Updated:		By:	API	30-025-33417	
Lease:	State 35 Unit		TSHP:	T17S Rng:	34E
Field:	Vacuum Grayburg San Andres		Unit Ltr:	P	
Surf. Loc.:	1170' FSL & 660' FEL		Section:	35	
Bot. Loc.:			TSHP/Rng:		
County:	Lea	St.: NM	Directions:		
Status:	Active Crude Oil Well		Chevno:	NA; McGowan Working Partners, Inc.	

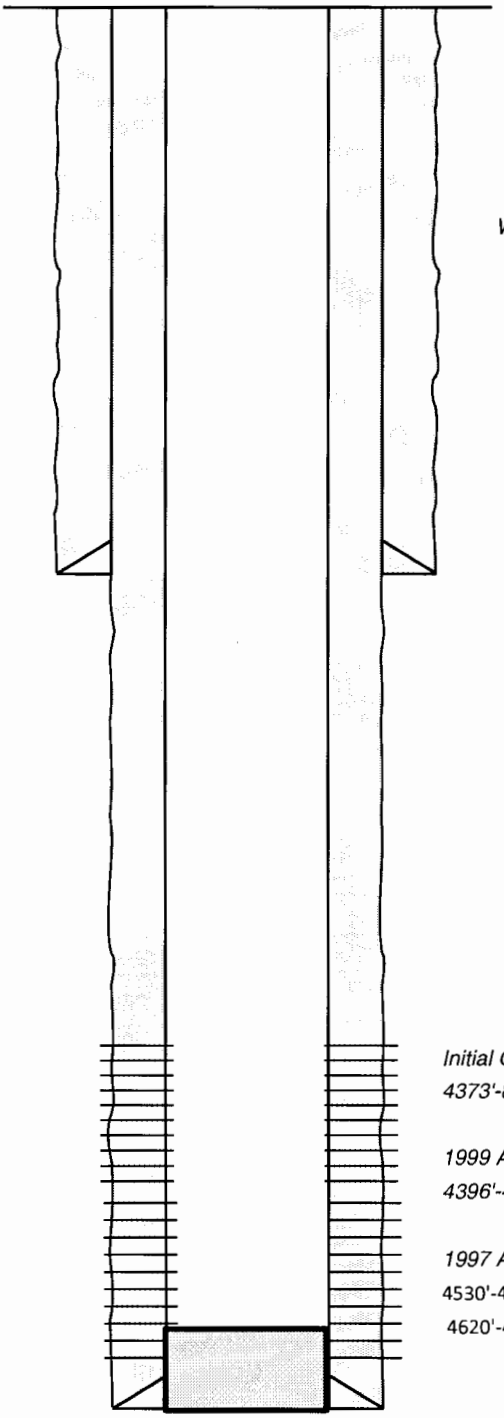
Surface Casing

Size:	8-7/8", J-55
Wt., Grd.:	24#
Depth:	1620'
Sxs Cmt:	850 sxs
Circulate:	yes, 195 sxs
TOC:	Surf
Hole Size:	12-1/4"

Production Casing

Size:	5-1/2", K-55
Wt., Grd.:	15.5#
Depth:	4997'
Sxs Cmt:	1150 sxs
Circulate:	Yes, 103 sxs
TOC:	Surf
Hole Size:	7-7/8"

Formation Tops:	
Yates	2791'
7RVS	3140'
Queen	3700'
Grayburg	4025'
San Andres	4330'



KB:	4024'
DF:	
GL:	4008'
Ini. Spud:	06/24/96
Ini. Comp.:	08/19/96

Well History

Initial History

Spud 6/24/96, Perfs 4464'-4476', 4373' - 4388', Acdz w/2218 gals. 15% HCL.
2/18/97 : W/O, acdz SA, Add perfs, 4530'-4565', 35', 70 shots; 4574'4594', 20', 40 shots, 4620'-4700', 80', 160 shots.
6/799: Re stim, Add perfs: 4396'-4416', 20', 40 Shots.
3/8/2000: Trt Scale, Acdz, Scale Sqz.
12/20/2001: Trt Scale, Acdz, Scale 5qz

Initial Grayburg Perf w/2 SPF
4373'-88'; 4464'-76' (44 holes)

1999 Add Perfs: w/2 SPF
4396'-4416' (40 shots)

1997 Add Perf:
4530'-4565', 35', 70 shots; 4574'-4594', 20', 40 shots
4620'-4700', 80', 160 shots.

PBTD:	4585'
TD:	5000'

State 35 Unit # 34

Created:	05/22/13	By: CHAY	Well #:	34	St. Lse:
Updated:		By:	API	30-025-30617	
Lease:	State 35 Unit		TSHP:	T17S	Rng: 34E
Field:	Vacuum Grayburg San Andres		Unit Ltr:	P	
Surf. Loc.:	620' FSL & 1250 FEL		Section:	35	
Bot. Loc.:			TSHP/Rng:		
County:	Lea	St.: NM	Directions:		
Status:	Active Crude Oil Well		Chevno:	NA; McGowan Working Partners, Inc.	

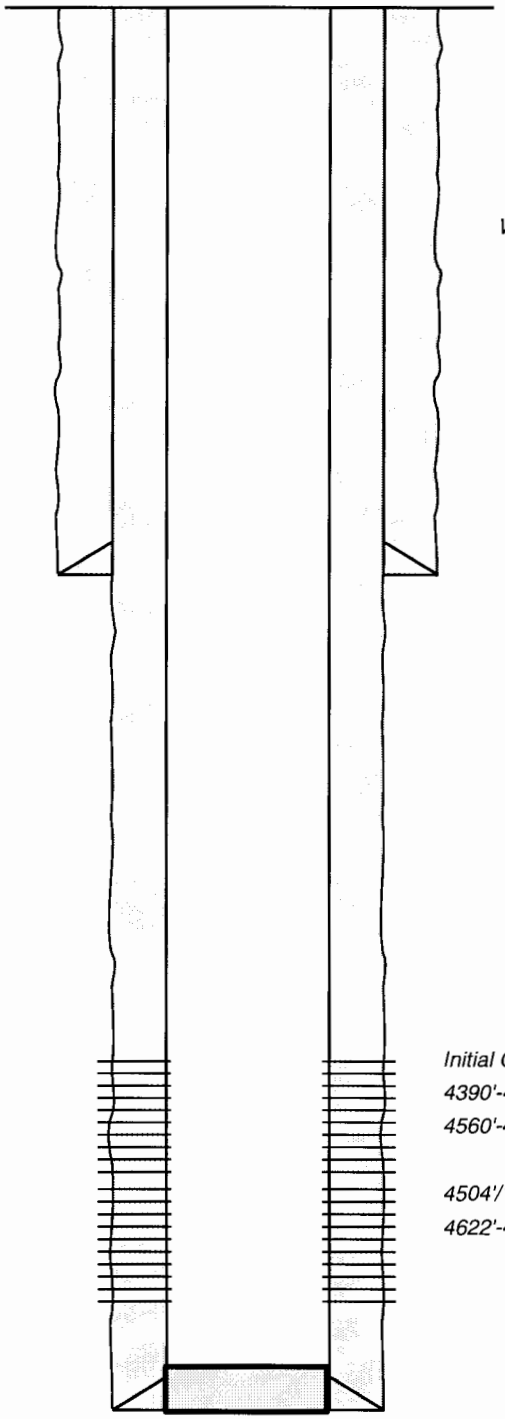
Surface Casing

Size:	13-3/8", J-55
Wt., Grd.:	54.4#
Depth:	1567'
Sxs Cmt:	1500 sxs
Circulate:	Yes, 600 sxs
TOC:	Surf
Hole Size:	17-1/2"

Production Casing

Size:	5-1/2", J-55
Wt., Grd.:	14#
Depth:	4800'
Sxs Cmt:	2000 sxs
Circulate:	Yes, 382 sxs
TOC:	Surf
Hole Size:	7-7/8"

Formation Tops:	
Yates	2803'
7RVS	3150'
Queen	3721'
Grayburg	4062'
San Andres	4388'



KB:	4019'
DF:	
GL:	4011'
Ini. Spud:	06/19/89
Ini. Comp.:	09/05/89

Well History

Initial History

Spud 6/19/89, Perfs 4390'-96'-4403'-08'; 4414'-21', 4432'-37', 4509'-14'; 4560'-66', Acdz w/11,700 gals. 15% HCL. Sqzd w/220 sxs Premium Plus.

1/31/96: Frac/Stim w/10,000 # 20/40 Sd, 4000 gals, 15# Gel & 5000 gals 2PPG Gel. Did same two time.

5/2/97: Add Perfs & Acdz. Lower San Andres.4504'-16', 12', 48 shots; 4566'-4636', 70', 280 shots; 4622'-4720', 58', 323 shots.

Initial Grayburg Perf w/4 SPF
4390'-4632'
4560'-4593'

4504'/16', 4566'-4636'
4622'-4720'

PBTD: 4640'
TD: 4800'

State 35 Unit # 35

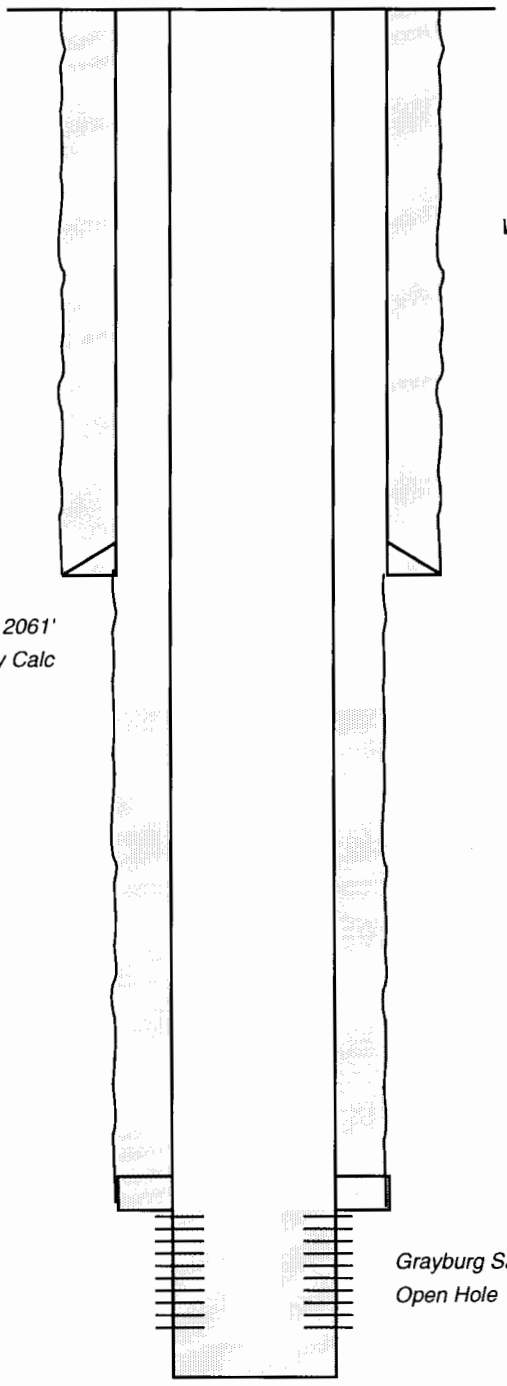
Created:	05/22/13	By: CHAY	Well #:	35	St. Lse:
Updated:		By:	API	30-025-02221	
Lease:	State 35 Unit		TSHP:	T17S Rng:	34E
Field:	Vacuum Grayburg San Andres		Unit Ltr:	P	
Surf. Loc.:	660' FSL & 660' FEL		Section:	35	
Bot. Loc.:			TSHP/Rng:		
County:	Lea	St.: NM	Directions:		
Status:	Active Crude Oil Well		Chevno:	NA; McGowan Working Partners, Inc.	

Surface Casing

Size:	9-5/8"
Wt., Grd.:	36#
Depth:	1491'
Sxs Cmt:	875 sxs
Circulate:	Yes
TOC:	Surf, by Calc
Hole Size:	12-1/2"

Production Casing

Size:	7"
Wt., Grd.:	24#
Depth:	4099'
Sxs Cmt:	400 sxs
Circulate:	No
TOC:	2061' by Calc
Hole Size:	8-3/4"



KB:	
DF:	
GL:	4008'
Ini. Spud:	11/02/38
Ini. Comp.:	12/25/38

Well History

Initial History

Acdz OH 4099'-4552', w/1500 gals DowellXX.

9/26/70: Trt OH w/300 gals 20% Acid.
5/31/72: Trt OH w/1000 gals 28% acid
10/31/72: TA'd
8/16/83: NSL Approved
5/22/85: Rpr Csg LK.
8/30/85: Trt for Salt & scale; Dpn & Acdz.
2/16/96: CO, Trt, Acdz.
1/9/97: Frac Stim Upper San Andres

Formation Tops:
Yates
7RVS
Queen
Grayburg
San Andres

PBTD:
TD: 4552'

State 35 Unit # 36

Created:	05/29/13	By: CHAY	Well #:	36	St. Lse:
Updated:		By:	API	30-025-20780	
Lease:	State 35 Unit		TSHP:	T17S	Rng: 34E
Field:	Vacuum Grayburg San Andres		Unit Ltr:	P	
Surf. Loc.:	660' FSL & 560' FEL		Section:	35	
Bot. Loc.:			TSHP/Rng:		
County:	Lea	St.: NM	Directions:		
Status:	Active Grayburg/SA Crude Oil Well		Chevno:	NA; McGowan Working Partners, Inc.	
				Formerly: ConocoPhillips	

Current Completion

Surface Casing

Size:	13-3/8"
Wt., Grd.:	48#
Depth:	320'
Sxs Cmt:	350 sxs
Circulate:	Yes
TOC:	Surf
Hole Size:	17-1/2"

Intermediate Casing

Size:	9-5/8"
Wt., Grd.:	32.2#
Depth:	3520'
Sxs Cmt:	400 sxs
Circulate:	No
TOC:	2500' by TS
Hole Size:	12-1/4"

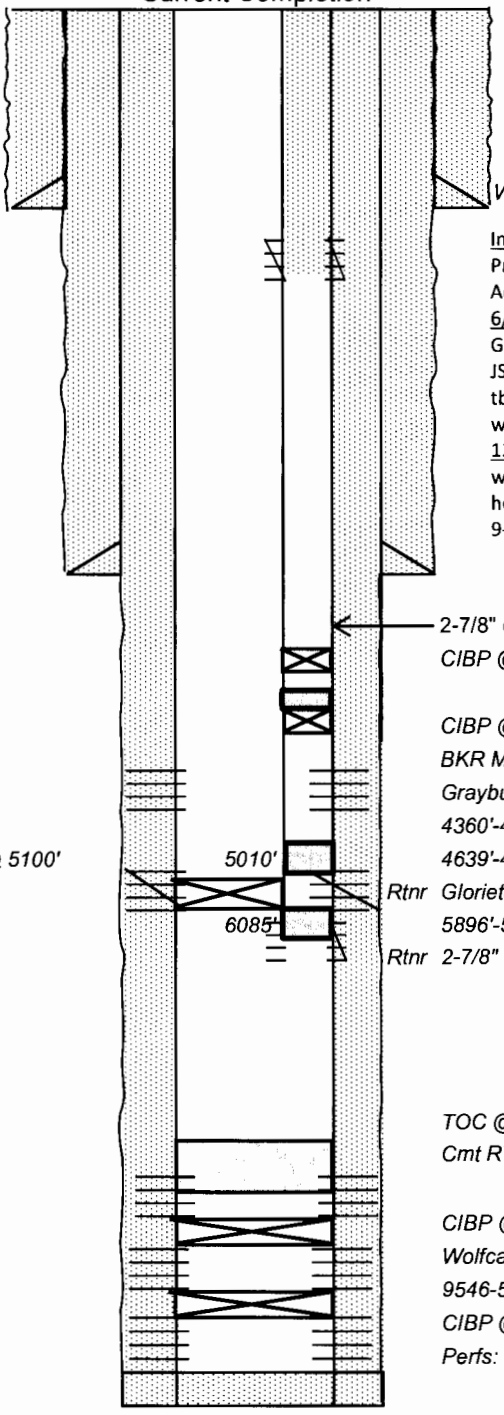
Production Casing - 2 stages

Size:	4-1/2"
Wt., Grd.:	9.5 & 11.6#
Depth:	10,359'
Sxs Cmt:	859 sxs
Circulate:	No
TOC:	2200' by TS
Hole Size:	7-7/8"

Stage 2

Size:	2-7/8"
Wt., Grd.:	6.5#
Depth:	6428'
Sxs Cmt:	662 sxs
Circulate:	No
TOC:	2200' by TS
Hole Size:	7-7/8"

Formation Tops:	
Yates	2820'
7RVS	
Queen	3710'
Grayburg	3895'
San Andres	4280'
Glorieta	5873'
Tubb	7360'
Abo	7894'
Penn	10,138'



KB: 4021'
DF:
GL: 4008'
Ini. Spud: 02/27/64
Ini. Comp.: 04/18/64

Well History

Initial History: Formation Glorieta, Dual Prod. Perfs, 6100'-6110'; & 9546'-9604'. Acdz w/4500 gals.
6/30/71: Set Rtnr @ 5010' in 2-7/8". Sqz Glorieta Perfs: 6069'-79'. Perf 4-1/2" w/2 JSPF, 5896'-5964', 29', 58 shots, set 2-3/8" tbg @ 5980', Bkr Model R PKR @ 5849'. Acdz w/500 gals 28% acid. Set tbg @ 5888'. RTP.
12/07/11: Set CIBP in 2-7/8" csg @ 4550' w/35' cmt on top. Set CIBP @ 4300', Perf 4 holes in 2-7/8" Csg @ top of cmt, circ fl. Cmt 9-5/8" Csg to Surf, Cmt, 13-3/8" csg to Surf.

2-7/8" csg
CIBP @ 4300' (2-7/8")

CIBP @ 4550' w/35' Cmt on top
BKR Model R Pkr
Grayburg/San Andres Perfs:
4360'-4574'
4639'-49', 4660'-70'
Rtnr *Glorieta Perfs: 4-1/2" csg*
5896'-5902', 596'-22', 5925'-32', 5954'-64'
Rtnr *2-7/8" Perfs: 6069'-79' Abdn'd*

TOC @ 8816'
Cmt RTN @ 9289'

CIBP @ 9752'
Wolfcamp Perfs:
9546-50', 9584'-9604', 9864'-72'
CIBP @ 9995'
Perfs: 10,034'-44'

Grayburg San Andres:

PBTD: 5100'
TD: 10,400'

State 35 Unit # 37

Created:	06/04/13	By: CHAY	Well #:	37	St. Lse:
Updated:		By:	API	30-025-28062	
Lease:	State 35 Unit		TSHP:	T17S	Rng: 34E
Field:	Vacuum Grayburg San Andres		Unit Ltr:	P	
Surf. Loc.:	10' FSL & 1210' FEL		Section:	35	
Bot. Loc.:			TSHP/Rng:		
County:	Lea	St.: NM	Directions:	2 miles SW/Buckeye	
Status:	Active Crude Oil Well		Chevno:	NA; McGowan Working Partners, Inc.	

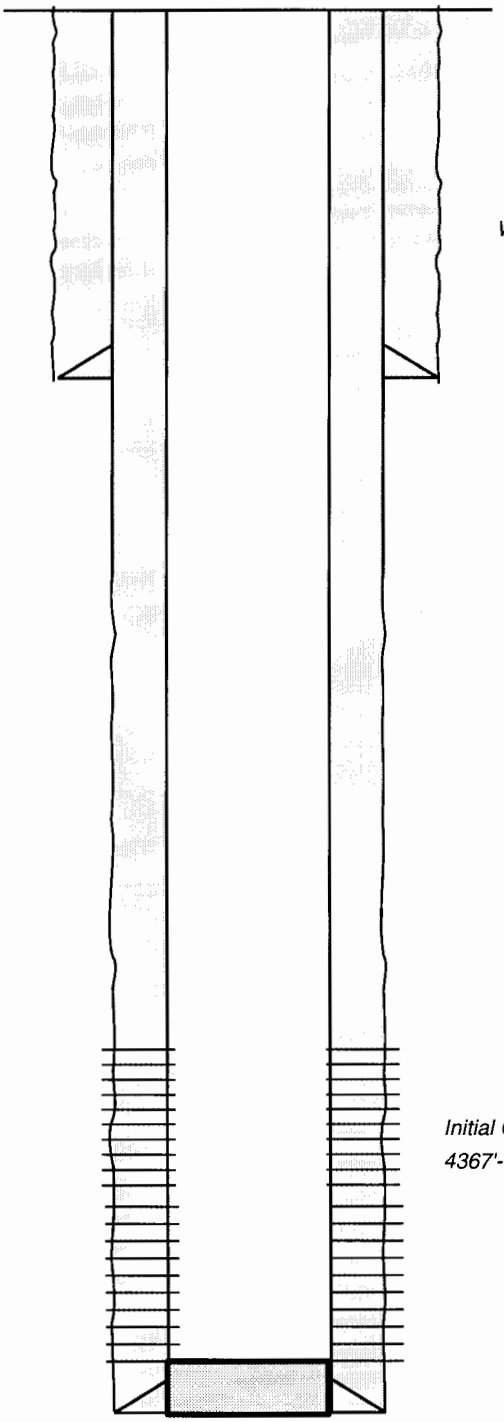
Surface Casing

Size:	13-38", K-55
Wt., Grd.:	54.5#
Depth:	1570'
Sxs Cmt:	1650 sxs
Circulate:	yes, 150 sxs
TOC:	Surf
Hole Size:	17-1/2"

Production Casing

Size:	5-1/2", K-55
Wt., Grd.:	15.5#
Depth:	4800'
Sxs Cmt:	1700 sxs
Circulate:	Yes, 200 sxs
TOC:	Surf
Hole Size:	7-7/8"

Formation Tops:	
Yates	2797'
7RVS	
Queen	3721'
Grayburg	4061'
San Andres	4350'



PBTD: 4728'
TD: 4800'

KB:	4022'
DF:	
GL:	4010'
Ini. Spud:	03/09/83
Ini. Comp.:	07/23/83

Well History

Initial History : San Andres Perfs: 4367'-77', 4384'-4454', 4466'-77', 4494'-4502', 4540'-4610', 4616'-22', 4633'-38', 4644'-52', 4658'-4710'. 24', 240 shots. Acdz w/1000 gals 15% Ne, 750 gals acid, pmp'd 14,150 gals w/ball sealer every 100 gals, total 146 balls.

w/1 SPF
(240' w/240 holes)
Initial Grayburg Perfs:
4367'- 4710'

NOTIFICATION LIST

Prepared 12/5/12 by Daniel Pequeno, Senior Land Representative

Application of Chevron U.S.A. Inc. for Administrative Approval of a Water Injection Well Location:

Vacuum Grayburg-San Andres Unit Well No. 247 (API #Unavailable)
1,800' FNL & 145' FEL (SHL); 1,320' FNL & 100' FEL (BHL)
Section 2, T-18-S, R-34E, Unit Letter H
Lea County, New Mexico

Offset Operators, Leaseholders, Working Interest Owners, for Section 35, T17S-R34E:

Chevron U.S.A. Inc.
15 Smith Road
Midland, Texas 79705

McGowan Working Interest Partners, Inc.
P. O. Box 55809
Jackson, MS 39296-5809

Offset Operators, Leaseholders, Working Interest Owners, for All of Section 36, T17S-R34E:

Mobil Producing Texas & New Mexico Inc.
c/o XTO Energy Inc.
Attn.: Permian Land
810 Houston Street
Fort Worth, Texas 76102

Chevron U.S.A. Inc.
15 Smith Road
Midland, Texas 79705

Offset Operators, Leaseholders, Working Interest Owners, for All of Sections 1 & 2, T18S-R34E:

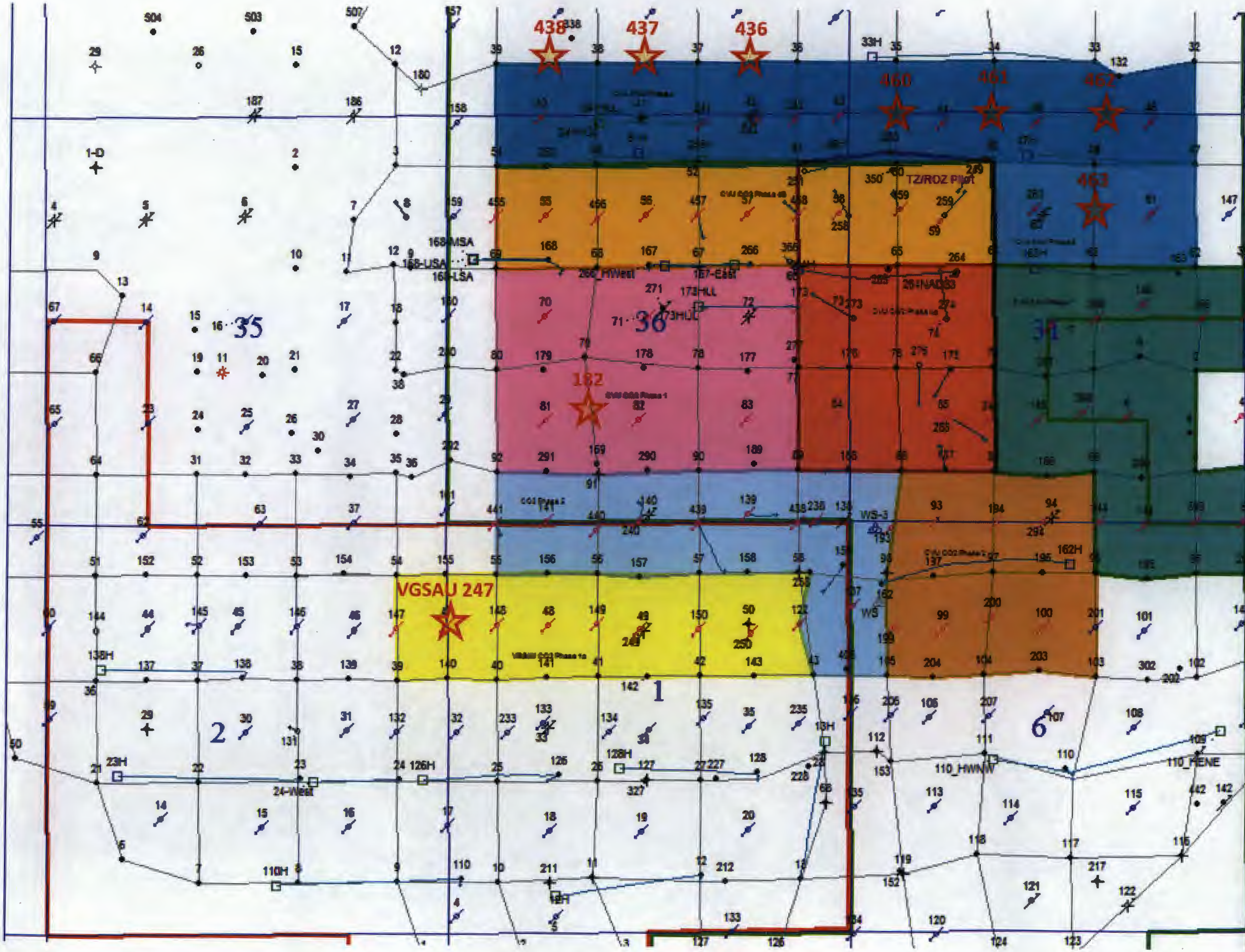
Chevron U.S.A. Inc.
15 Smith Road
Midland, Texas 79705

Surface Owner for All of Section 2, T-17-S-R34E:

State of New Mexico
Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

Signed By: _____
Daniel Pequeno, Landman

Date: December 5, 2012



438
437
436
460
461
462
463
TZ/ROZ Pilot
35
36
31
182
VGSAU 247
1
2
6

OFFSET OPERATORS:

McGowan Working Interest Partners, Inc.
P.O. Box 55809
Jackson, MS 39296-5809

Chevron

Carolyn Haynie
Petroleum Engineering
Technical Assistant

MidContinent/Alaska SBU
Chevron North America
Exploration and Production
Company
15 Smith Road
Midland, TX 79705
Tel 432-687-7261
Fax 432-687-7703
chay@chevron.com

June 10, 2013

Water, Gas & CO2 Injection Expansion
Vacuum Grayburg San Andres Unit # 247
Lea County, New Mexico

Offset Operators:

For your information, as an offset operator, Chevron U.S.A. Inc., operator of the Vacuum Grayburg San Andres Unit has filed an application with the New Mexico Oil Conservation Division and to drill well # 247 as a WAG Well, for water, produced gas, and CO2 injection in the Grayburg San Andres formation. VGSAU # 247 will replace the VGSAU # 47, which failed to pass the MIT, and was plugged and abandoned, 3-7-2013.

Attached is the information relative to the proposed expansion. A copy of the legal notice posted in the Hobbs News-Sun is included. The enclosed map highlights the location of the referenced wells in relation to your offset operations.

If additional information is required, please contact me at (432-687-7261), or the project engineer, Ryan Warmke, at (432-687-7452).

Interested parties must file objections with the Oil Conservations Division, 1220 South St. Francis Dr., Santa Fe, New Mexico, 87505, within 15 days.

Sincerely,

Carolyn Haynie

Carolyn Haynie
NM PE Technical Assistant

Enclosure

Chevron

Carolyn Haynie
Petroleum Engineering
Technical Assistant

MidContinent/Alaska SBU
Chevron North America
Exploration and Production
Company
15 Smith Road
Midland, TX 79705
Tel 432-687-7261
Fax 432-687-7703
chay@chevron.com

June 10, 2013

STATE OF NEW MEXICO
COMMISSIONER OF PUBLIC LANDS
P.O. BOX 1148
SANTA FE, NE 87504-1148

RE: Application for Authorization to Inject
OCD Form C-108
Vacuum Grayburg San Andres Unit
Lea, County, New Mexico

Surface Owner:

For your information, Chevron USA Inc. as operator, filed an application with the New Mexico Oil Conservation Division to place the Vacuum Grayburg San Andres Unit well # 247, (API 30-025-4994), on injection, as a replacement well for the VGSAU # 47, which was P&A'd, 3-7-13. Chevron plans to inject produced water, gas, and CO_2.

Attached is the OCD form C-108 and the information relative to the proposed expansion.

Any objection to this application must be sent to the **New Mexico Oil Conservation Division; 1220 South St. Francis Drive; Santa Fe, NM 87504**, within 15 days of receipt of this notification.

If additional information is required, please contact me at (432-687-7261), or the project engineer, Ryan Warmke, at (432-687-7452).

Sincerely,

Carolyn Haynie
NM PE Technical Assistant

Enclosure

Affidavit of Publication

State of New Mexico,
County of Lea.

I, JUDY HANNA
PUBLISHER
of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period

of 1 issue(s).
Beginning with the issue dated
March 13, 2013
and ending with the issue dated
March 13, 2013

PUBLISHER
Sworn and subscribed to before me
this 13th day of
March, 2013

Notary Public

My commission expires
January 29, 2015
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-15

This newspaper is duly qualified to publish legal notices or advertisments within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said publication has been made.

LEGAL

LEGAL NOTICE
March 13, 2013

Notice is hereby given of the application of CHEVRON U.S.A, INC. 15 Smith Road, Midland, TX 79705, to the Oil Conservation of the State of New Mexico, and the Commissioner of Public Lands, State of New Mexico for approval to convert the Vacuum Grayburg San Andres Unit # 247, as a Water Injection well. Injection into this well is designed to enhance production from the Vacuum Grayburg San Andres Unit. **The VGSAU # 247 is located 1800' FNL & 145' FEL, Unit Letter H, Sec. 2, T18S, R34E, Lea County, New Mexico.**

The injection interval is in the Grayburg San Andres formation from 3902'-5020', thru perforations. The maximum injection rate will be 2,000 BWPD, with a maximum allowable amount of 1500 PSI. CO2 and produced gas injection will be an expected maximum rate of 4000 MCF per day and an expected maximum surface pressure of 2200 PSI. Interested parties should file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505 within 15 days.

Inquiries regarding this application should be directed to Chevron North America, Attn: Edgar Acero, 15 Smith Rd., Midland TX 79705.

#27994

01102480 00110842

CHEVRON USA INC.
15 SMITH ROAD
MIDLAND, TX 79705

Injection Permit Checklist: Received 06/17/2013 First Email Date: ______ Final Reply Date: ______ Suspended?: ______

Issued Permit: Type: (WFX) PMX / SWD Number: 915 Permit Date: 07/23/2013 Legacy Permits or Orders: *R-4442-G

Well No. #247 Well Name(s): Vacuum Grayburg San Andres Unit (VGSAU) *CO_2 & produced water

API : 30-0 25-40994 Spud Date: July 2013 New/Old: (N) (UIC Cl II Primacy March 7, 1982)

Footages SL: 1800 FNL / 145 FEL BH: 1320 FNL / 100 FEL Lot – Unit H Sec 2 Tsp 18S Rge 34E County Lea

General Location: Vacuum Field ~21 mi west of Hobbs Pool: Vacuum (Grayburg-San Andres) Pool No.: ______

Operator: Chevron USA, Inc. OGRID: 4323 Contact: Carolyn Haynie

COMPLIANCE RULE 5.9: Inactive Wells: 5 TotalWells: 2162 Fincl Assur: OK-Blanket Compl. Order? No IS 5.9 OK? Yes

Well File Reviewed: ✓ HR+Case Current Status: Proposed replacement for VGSAU #47 - identified in R-4442-G

Planned Rehab Work to Well: NA

Well Diagrams: Proposed ✓ Before Conversion ____ After Conversion ____ Are Elogs in Imaging?: ______

Well Construction Details:	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement (Sx) or Cf	Cement Top and Determination Method
Planned __or Existing __Cond	—	—	—	—	—
Planned __or Existing __Surface	14 3/4 / 11 3/4	0 to 1525	—	1300	Circulate to surf
Planned__or Existing __Interm	11 / 8 5/8	0 to 3200	—	750	Circulate to surf
Planned__or Existing __ LongSt	7 7/8 / 5 1/2	0 to 5300	—	1150	Circulate to surf
Planned__or Existing __ Liner	—	—	—	—	—
Planned__or Existing __ OH/(PERF)	5 1/2	4290-4850	NA		

Injection Strat Column:	Depths (ft)	Formation	Tops?
Above Top of Inject Formation	Shallow	Seven Rivers	
Above Top of Inject Formation	depths NA	Queen	
Proposed Interval TOP:	Injection	4290/Gray	4220 / 4343
Proposed Interval BOTTOM:	info in file	4850/SA	~~4850~~
Below Bottom of Inject Formation	& order	Glorieta	4850
Below Bottom of Inject Formation			

Completion/Ops Details:

Drilled TD 5300 PBTD <5300

Open Hole ____ or Perfs ✓

Tubing Size 2 3/8 Inter Coated? ✓ FG

Proposed Packer Depth 4280

Min Packer Depth 4190 (100-ft limit)

Proposed Max. Surface Press [see R-4442-G]

Calc. Injt Press — (0.2 psi per ft)

Calc. FPP — (0.65 psi per ft)

Type - R4442G / Texaco's New Mexico "M" State #9 - 3902 to 4,809 Directional Well

AOR: Hydrologic and Geologic Information

POTASH: R-111-P No Noticed? — **BLM Sec Ord** No **WIPP** No Noticed? — **SALADO:** T: NA B: NA **CLIFF HOUSE** NA

Fresh Water: Max Depth: 200 few Formation Ogallala Wells? 0 Analysis? No HydrologicAffirmStatement Yes

Disposal Fluid: Formation Source(s) Red Beds VGSA / CO_2 produced onsite / reinjection + purchased CO_2 + production water On (Lease X) Only from Operator ____ or Commercial ____

Injection Rate: 2000/4000 **Disposal Interval:** Protectable Waters? No **CAPITAN REEF:** in No thru No adjacent No

H/C Potential: Producing Interval? Yes - waterflood / EOR Formerly Producing? ______ Method: E Log /Mudlog/DST/Depleted/Other NA

AOR Wells: 1/2-M Radius Map? Yes Well List? Yes Total No. Wells Penetrating Interval: 5

Penetrating Wells: No. Active Wells 4 Num Repairs? 0 on which well(s)? ______ Diagrams? Yes

Penetrating Wells: No. P&A Wells 1 Num Repairs? 0 on which well(s)? ______ Diagrams? Yes

NOTICE: Newspaper Date 03/13/13 Mineral Owner SLO Surface Owner SLO N. Date 12/5/12

RULE 26.7(A): Identified Tracts? ✓ Affected Persons: McGowan Working IP / Mobil N. Date 12/5/12

Permit Conditions: None other than stipulated in Orders of previous PMX-44

Issues: