

10/01/2014  
DATE IN

SUSPENSE

PRG  
ENGINEER10/02/2014  
LOGGED INWFX  
TYPEDRAFT#427544276  
APP NO.

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]

- [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL  NSP  SD

- WFX  
 - Chevron U.S.A. Inc.  
 4323

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement  
 DHC  CTB  PLC  PC  OLS  OLM

CHE  
 - 15 + tota  
 - Vacuum Gloceta  
 west unit #  
 30-025-31835

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX  PMX  SWD  IPI  EOR  PPR

- [D] Other: Specify \_\_\_\_\_

- POOL  
 - Vacuum  
 - Gloceta  
 62160

**[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.

Sean Anderson  
Print or Type Name

NM Petroleum Engineering TA  
Title

9-29-14  
Date

Sean.Anderson@chevron.com  
e-mail Address

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE:  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: **SEAN HEASTER** PHONE **432-640-9031**
- 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?  Yes  No  
If yes, give the Division order number authorizing the project: **R9710 - R9714**
- 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.
- 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.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  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.).
- \*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.
- IX. Describe the proposed stimulation program, if any.
- \*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.
- 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: **SEAN HEASTER** TITLE: **PRODUCTION ENGINEER**

SIGNATURE:  DATE: **9/29/14**

E-MAIL ADDRESS: **SHeaster@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: **R9710 - 8/25/92 - Unitization; R9714 - 9/3/92 - Waterflood**

### 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.

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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.

## **FORM C-108 continued**

**I**

The purpose of this application is for pressure maintenance.

**II**

OPERATOR: Chevron U.S.A. Inc.  
ADDRESS: 15 Smith Road, Midland TX 79705  
CONTACT PARTY: Sean Heaster PHONE: 432-640-9031

**III**

Please see Exhibit A

**IV**

This is an expansion of an existing project. Division order authorizing the project is R-9710 & R-9714.

**V**

Please see Exhibit B

**VI**

Please see Exhibit C

**VII**

1. Please see Exhibit D
2. This is a closed system.
3. Please see Exhibit D
4. All water injected is produced water
5. All water will be injected into a zone which produces oil and gas. Injection is not for disposal purposes.

**VIII**

Previously submitted (Division order R-9710 & R-9714)

**IX**

All subject wells are currently active water injection wells. There is currently no stimulation program.

**X**

Previously submitted (Division order R-9710 & R-9714)

**XI**

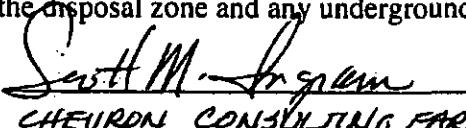
Previously submitted (Division order R-9710 & R-9714)

**XII**

Chevron U.S.A. Inc. has examined available geologic and engineering data and finds no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

Scott M Ingram, Earth Scientist

Signed

  
*Scott M. Ingram*  
CHeVRON CONSULTING EARTH SCIENTIST

Date 10/02/2014

**XIII**

Please see Exhibit E

**XIV**

Please see certification on page 1 of C-108 form.

R-9714

IPI-2  
7/23/99

## EXHIBIT A - Page 1

API	Lease	Well #	Well Type	Status	Hole Size (in)	Casing Type	Casing Size (in)	Set at (ft)	Sacks	Cement	Top Surface	Method Circ Circ Circ	Perfor OH	Current Inj Interval	Tubing Size OD	Lining Material	Type of PKR	PKR Set Depth (ft)	Field	Injection Formation
1 3002531835	VGWU	9	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1580 6464	650 1600	Surface	Circ Circ Circ	Perf	1 5928-6068 ✓	2.375	IPC	Unknown	5914	Vacuum	Glorieta/Paddock	
2 3002531869	VGWU	27	IPI Inj	Active	11 7.875	Surf	8.625	1580	650	Surface	200 sx Pump Down BS	Perf	2 5860-6123 ✓	2.375	Duo-Line	Loc Set Nickel Plated	5797	Vacuum	Glorieta/Paddock	
3 3002531784	VGWU	28	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1530 6290	650 1530	Surface	Circ Circ Circ	Perf	3 5860-5957 ✓	2.375	Duo-Line	1X Arrow Set	5804	Vacuum	Glorieta/Paddock	
4 3002531699	VGWU	38	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1550 6270	600 1375	Surface	Circ Circ Circ	Perf	4 5820-5936 ✓	2.375	Duo-Line	Hudson	5783	Vacuum	Glorieta/Paddock	
5 3002531700	VGWU	39	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1550 6280	850 1700	Surface	Circ Circ Circ	Perf	5 5843-5956 ✓	2.375	Duo-Line	1X Arrow Set	5779	Vacuum	Glorieta/Paddock	
6 3002531701	VGWU	40	IPI Inj	TA	11 7.875	Surf Prod	8.625 5.5	1549 6290	650 1700	Surface	300 sx Oump	Perf	6 5880-5974 ✓	N/A	N/A	N/A	N/A	Vacuum	Glorieta/Paddock	
7 3002531838	VGWU	41	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1566 6328	650 1985	Surface	Down BS Circ	Perf	7 5830-5990 ✓	2.375	IPC	Baker	5788	Vacuum	Glorieta/Paddock	
8 3002531815	VGWU	42	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1530 6345	650 915	Surface	Circ Circ Circ	Perf	8 5932-5992 ✓	2.375	Duo-Line	1X Arrow Set	5839	Vacuum	Glorieta/Paddock	
9 3002531870	VGWU	50	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1530 6288	650 2200	Surface	Circ Circ Circ	Perf	9 5850-6100 ✓	2.375	Duo-Line	Loc Set Nickel Plated	5797	Vacuum	Glorieta/Paddock	
10 3002531728	VGWU	51	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1550 6255	650 2175	Surface	Circ Circ Circ	Perf	10 5852-5948 ✓	2.375	Duo-Line	Loc Set Nickel Plated	5796	Vacuum	Glorieta/Paddock	
11 3002531702	VGWU	52	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1550 6285	650 1675	Surface	Circ Circ Circ	Perf	11 5881-5974 ✓	2.375	IPC	1X Arrow Set	5854	Vacuum	Glorieta/Paddock	
12 3002531703	VGWU	53	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1550 6300	650 1900	Surface	Circ Circ Circ	Perf	12 5908-5993 ✓	2.375	IPC	1X Arrow Set	5859	Vacuum	Glorieta/Paddock	
13 3002531816	VGWU	54	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1550 6300	650 1450	Surface	Circ Circ Circ	Perf	13 5914-6000 ✓	2.375	IPC	1X Arrow Set	5853	Vacuum	Glorieta/Paddock	
14 3002531704	VGWU	64	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1527 6255	650 1620	Surface	Temp Surv Circ	Perf	14 5951-6109 ✓	2.375	IPC	G-6	5774	Vacuum	Glorieta/Paddock	
15 3002531705	VGWU	65	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1550 6270	650 1250	Surface	300 sx Oump	Perf	15 5850-5905 ✓	2.375	IPC	1X Arrow Set	5818	Vacuum	Glorieta/Paddock	
16 3002531872	VGWU	77	IPI Inj	Active	11 7.875	Surf	8.625	1550	650	Surface	600 sx Oump	Perf	16 5840-6020 ✓	2.375	IPC	Unknown	Top - 5801 Btm - 5933	Vacuum	Glorieta/Paddock	
3002531858	VGWU	104	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1500 6245	650 1390	Surface	Circ Circ Circ	Perf	17 5890-6102 ✓	2.375	Duo-Line	Loc Set Nickel Plated	5855	Vacuum	Glorieta/Paddock	
3002531884	VGWU	107	IPI Inj	Active	11 7.875	Surf Prod	8.625 5.5	1470 6390	650 1278	Surface	Circ Circ Circ	Perf	18 5916-6212 ✓	2.375	Duo-Line	Unknown	5844	Vacuum	Glorieta/Paddock	

## EXHIBIT A - Page 2

API	Lease	Well #	Operator	County	Township	Range	Section	Unit	Lat	Long	Footage		E/W	Spud	P&A
											N/S	E/W			
3002531835	VGWU	9	Chevron USA Inc.	Lea	17S	34E	25	C	32.81283	-103.51775	73 FNL	1411 FWL	4/6/1993	N/A	
3002531869	VGWU	27	Chevron USA Inc.	Lea	17S	34E	26	I	32.80492	-103.52254	2359 FSL	64 FEL	5/12/1993	N/A	
3002531784	VGWU	28	Chevron USA Inc.	Lea	17S	34E	25	L	32.80477	-103.51866	2304 FSL	1127 FWL	11/20/1992	N/A	
3002531699	VGWU	38	Chevron USA Inc.	Lea	17S	34E	25	M	32.80179	-103.5225	1217 FSL	24 FWL	9/22/1992	N/A	
3002531700	VGWU	39	Chevron USA Inc.	Lea	17S	34E	25	M	32.80172	-103.51889	1194 FSL	1055 FWL	10/2/1992	N/A	
3002531701	VGWU	40	Chevron USA Inc.	Lea	17S	34E	25	K	32.8028	-103.5145	1590 FSL	2404 FWL	10/14/1992	N/A	
3002531838	VGWU	41	Chevron USA Inc.	Lea	17S	34E	25	J	32.80221	-103.51044	1377 FSL	1646 FEL	2/24/1993	N/A	
3002531815	VGWU	42	Chevron USA Inc.	Lea	17S	34E	30	M	32.80147	-103.50495	1114 FSL	41 FWL	1/7/1993	N/A	
3002531870	VGWU	50	Chevron USA Inc.	Lea	17S	34E	35	A	32.79753	-103.52627	328 FNL	1214 FEL	5/22/1993	N/A	
3002531728	VGWU	51	Chevron USA Inc.	Lea	17S	34E	35	A	32.79836	-103.522749	24 FNL	101 FEL	10/23/1992	N/A	
3002531702	VGWU	52	Chevron USA Inc.	Lea	17S	34E	25	N	32.79902	-103.51702	214 FSL	1630 FWL	11/2/1992	N/A	
3002531703	VGWU	53	Chevron USA Inc.	Lea	17S	34E	25	N	32.79902	-103.51467	215 FSL	2350 FWL	11/9/1992	N/A	
3002531816	VGWU	54	Chevron USA Inc.	Lea	17S	34E	36	B	32.79828	-103.51022	51 FNL	1588 FEL	1/24/1993	N/A	
3002531704	VGWU	64	Chevron USA Inc.	Lea	17S	34E	36	E	32.79436	-103.52164	1484 FNL	204 FWL	10/16/1992	N/A	
3002531705	VGWU	65	Chevron USA Inc.	Lea	17S	34E	36	F	32.79425	-103.51744	1522 FNL	1492 FWL	10/6/1992	N/A	
3002531872	VGWU	77	Chevron USA Inc.	Lea	17S	34E	35	I	32.79085	-103.52627	2569 FSL	1226 FEL	6/10/1993	N/A	
3002531858	VGWU	104	Chevron USA Inc.	Lea	17S	34E	36	M	32.78479	-103.52128	361 FSL	300 FWL	3/22/1993	N/A	
3002531884	VGWU	107	Chevron USA Inc.	Lea	17S	34E	36	P	32.78441	-103.50812	183 FSL	931 FEL	5/14/1993	N/A	

**EXHIBIT A - Page 3**

EXHIBIT B

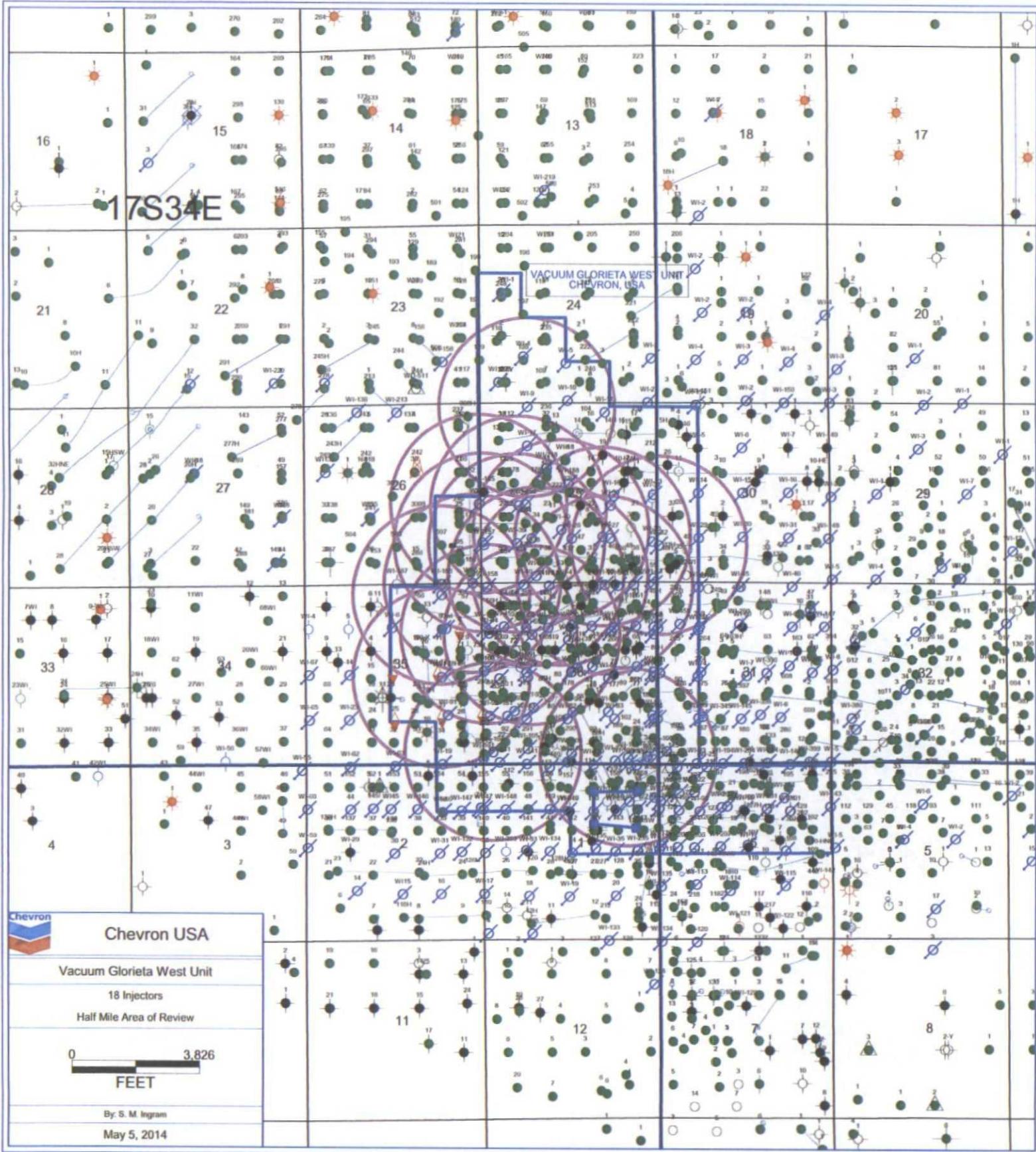
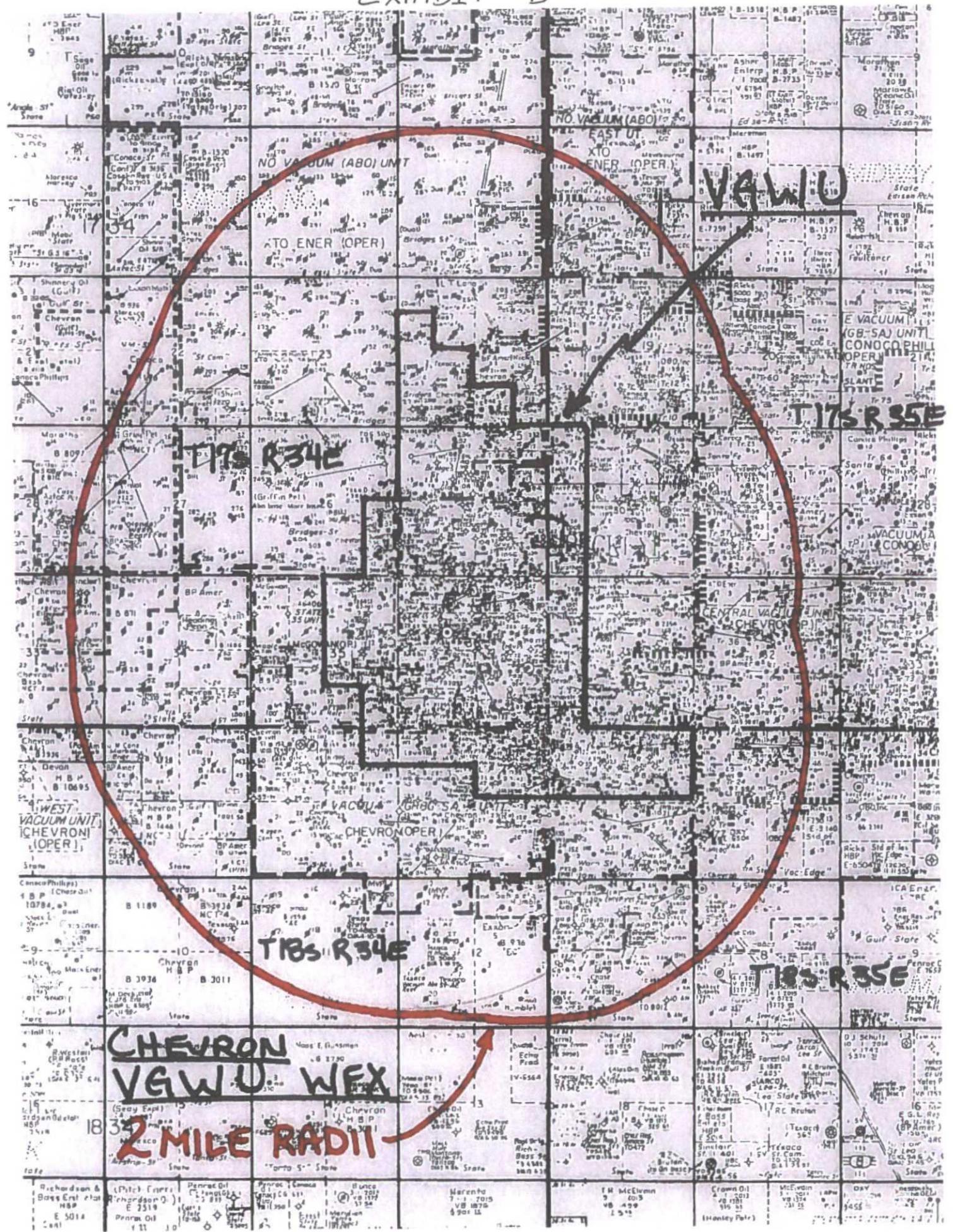


EXHIBIT B



# EXHIBIT C - Page 1

Wells within one half mile of the 18 VGWU injectors with added perforations outside the approved injection interval and TD >5900'.

UWI (APINum)	Operator	Well Name	Well Number	Township	Range	Section	Spot NS Footage	Spot NS Dir	Spot EW Footage	Spot EW Dir	TD	ELEV_KB	ELEV_GR	SPUD_DATE	COMP_DATE	Plugged Date (if P&A'd)	Well Type
30025020910001	CHEVRON	VGWU	7	175	34E	24	660	FSL	1980	FWL	6307	4028	4016	12/15/1992	3/25/1994		P
30025020920001	TEXACO	VGWU	2	175	34E	24	1980	FSL	660	FWL	6310	4028	4016	11/25/1992	4/15/1994	2/12/2003	P
30025200680002	CHEVRON	VGWU	44	175	34E	26	710	FSL	860	FEL	5916	4019	4008	12/8/1999	12/20/1999		P
30025201480100	CHEVRON U S A INC	VGWU	32H	175	34E	26	1780	FSL	660	FEL	7837	4022	4013	12/18/2002	1/18/2003		P
30025202490100	CHEVRON	VGWU	46H	175	34E	25	990	FSL	1650	FWL	8237	4014	4005	3/5/2003	4/21/2003		P
30025203340001	TEXACO	STATE BA	7	175	34E	36	660	FNL	1880	FWL	6750	4011	4001	1/9/2001	9/6/2001		P
30025248510100	XTO ENERGY INC	VACUUM NORTH ABO UN	222	175	34E	24	2100	FSL	660	FEL	10062	4051	4034	10/5/2007	11/29/2007		P
30025272360001	TEXACO	VGWU	35	175	34E	25	2310	FSL	2308	FEL	6150	4009	3998	5/1/2000	5/15/2000	9/9/2011	P
30025285020100	XTO ENERGY INC	VACUUM NORTH ABO UN	242	175	34E	26	1809	FNL	1890	FEL	9752	4019	4023	8/11/2008	1/2/2009		P
30025294300001	EXXONMOBIL CORP	BRIDGES STATE	286	175	34E	26	540	FSL	1930	FEL	8700	4034	4016	1/8/2002	4/20/2002		P
30025299190100	CHEVRON	VGWU	99H	175	34E	36	990	FSL	990	FWL	6709	4014	3998	2/7/1999	5/6/1999		P
30025301030100	CHEVRON	CVU	253H	175	34E	36	675	FNL	1330	FWL	6325	4018	4005	5/17/2001	7/6/2001		P
30025316990000	CHEVRON	VGWU	WI-38	175	34E	25	1217	FSL	24	FWL	6270	4019	4005	9/22/1992	10/8/1992		I
30025317000000	CHEVRON	VGWU	WI-39	175	34E	25	1194	FSL	1055	FWL	6280	4016	4002	10/2/1992	10/19/1992		I
30025317010000	CHEVRON	VGWU	WI-40	175	34E	25	1590	FSL	2404	FWL	6290	4015	4001	10/14/1992	11/3/1992		I
30025317020000	CHEVRON	VGWU	WI-52	175	34E	25	214	FSL	1630	FWL	6285	4019	4005	11/1/1992	11/18/1992		I
30025317030000	CHEVRON	VGWU	S3	175	34E	25	215	FSL	2350	FWL	6300	4017	4003	11/9/1992	11/30/1992		I
30025317040000	CHEVRON	VGWU	WI-64	175	34E	36	1484	FNL	204	FWL	6255	4022	4008	10/16/1992	11/7/1992		I
30025317050000	CHEVRON	VGWU	WI-65	175	34E	36	1522	FNL	1492	FWL	6270	4018	4004	10/6/1992	10/26/1992		I
30025317060000	CHEVRON	VGWU	WI-66	175	34E	36	1690	FNL	2577	FWL	6290	4007	3993	9/24/1992	10/13/1992		I
30025317070000	CHEVRON	VGWU	WI-78	175	34E	36	2491	FNL	127	FWL	6250	4019	4005	10/27/1992	11/14/1992		I
30025317080000	CHEVRON	VGWU	WI-79	175	34E	36	2561	FSL	1351	FWL	6255	4018	4004	11/7/1992	11/23/1992		I
30025317090000	CHEVRON	CVU	271	175	34E	36	2517	FNL	2442	FEL	6275	4011	3997	11/18/1992	12/6/1992		I
30025317280000	CHEVRON	VGWU	WI-51	175	34E	35	24	FNL	101	FWL	6255	4023	4009	10/23/1992	11/10/1992		I
30025317810000	CHEVRON	VGWU	WI-17	175	34E	25	1228	FNL	1399	FWL	6290	4022	4008	12/8/1992	12/29/1992		P
30025317820000	CHEVRON	VGWU	WI-18	175	34E	25	1651	FNL	2543	FWL	6305	4014	4000	11/29/1992	12/16/1992		P
30025317830000	CHEVRON	VGWU	19	175	34E	25	1501	FNL	1620	FEL	6313	4011	3997	12/18/1992	1/8/1993	11/3/2011	I
30025317840000	CHEVRON	VGWU	WI-28	175	34E	25	2304	FSL	1127	FWL	6290	4020	4006	11/20/1992	12/10/1992		I
30025317850000	CHEVRON	CVU	222	175	34E	25	2522	FSL	2283	FWL	6300	4026	4012	11/30/1992	12/22/1992		P
30025317860000	CHEVRON	VGWU	WI-30	175	34E	25	2305	FSL	1391	FEL	6340	4004	3990	12/10/1992	1/5/1993		I
30025318070000	CHEVRON	CVU	212	175	34E	25	1541	FNL	181	FEL	6352	4008	3994	12/28/1992	1/21/1993		P
30025318080000	CHEVRON	VGWU	WI-67	175	34E	36	1435	FNL	1408	FEL	6332	4007	3993	2/3/1993	2/20/1993		I
30025318090000	CHEVRON	VGWU	WI-92	175	34E	36	1426	FSL	199	FWL	6241	4014	4000	1/9/1993	1/26/1993		I
30025318100000	CHEVRON	VGWU	WI-93	175	34E	36	1459	FSL	1048	FEL	6268	4012	3998	1/16/1993	2/8/1993		I
30025318140000	CHEVRON	VGWU	WI-31	175	34E	25	2520	FSL	153	FEL	6353	3996	3982	12/21/1992	1/12/1993		I
30025318150000	CHEVRON	VGWU	WI-42	175	35E	30	1114	FSL	41	FWL	6345	3998	3984	1/7/1993	1/30/1993		I
30025318160000	CHEVRON	VGWU	WI-54	175	34E	36	51	FNL	1588	FEL	6338	4010	3996	1/24/1993	2/19/1993		I
30025318170000	CHEVRON	VGWU	55	175	34E	25	146	FSL	128	FEL	6334	4004	3990	12/30/1992	1/20/1993		P
30025318330000	CHEVRON	VGWU	WI-4	175	34E	24	1410	FSL	1300	FWL	6425	4025	4011	4/29/1993	5/20/1993		I
30025318340000	CHEVRON	VGWU	WI-5	175	34E	24	1209	FSL	2582	FWL	6475	4015	4001	4/18/1993	5/5/1993		I
30025318350000	CHEVRON	VGWU	WI-9	175	34E	25	73	FNL	1411	FWL	6464	4022	4008	4/6/1993	4/25/1993		I
30025318360000	TEXACO	VGWU	WI-10	175	34E	24	100	FSL	2628	FWL	6360	4015	4001	3/26/1993	4/10/1993		I
30025318370000	TEXACO	VGWU	WI-11	175	34E	25	246	FNL	1554	FEL	6360	4012	3998	3/15/1993	4/1/1993		I
30025318380000	CHEVRON	VGWU	WI-41	175	34E	25	1377	FSL	1646	FEL	6328	4009	3995	2/23/1993	3/23/1993		I
30025318390000	CHEVRON	VGWU	WI-68	175	34E	36	1517	FNL	139	FEL	6338	4003	3989	2/14/1993	3/10/1993		I
30025318400000	CHEVRON	VGWU	WI-82	175	34E	36	2576	FSL	149	FEL	6334	4000	3986	3/10/1993	3/26/1993		I
30025318410000	TEXACO	VGWU	WI-94	175	34E	36	1525	FSL	2591	FEL	6280	4008	3994	1/27/1993	2/17/1993		I
30025318420000	CHEVRON	VGWU	WI-81	175	34E	36	2521	FSL	1503	FEL	6304	4005	3991	2/6/1993	2/25/1993		I
30025318430000	CHEVRON	VGWU	WI-95	175	34E	36	1534	FSL	1521	FEL	6283	4004	3990	2/15/1993	3/11/1993		I
30025318440000	TEXACO	VGWU	WI-96	175	34E	36	1427	FSL	183	FEL	6343	4000	3986	2/26/1993	3/18/1993		I
30025318580000	TEXACO	VGWU	WI-104	175	34E	36	361	FSL	300	FWL	6245	4017	4003	3/22/1993	4/7/1993		I
30025318590000	CHEVRON	VGWU	WI-120	185	34E	1	1102	FNL	1575	FEL	6321	4002	3988	6/30/1993	7/23/1993		I
30025318690000	TEXACO	VGWU	WI-27	175	34E	26	2359	FSL	64	FEL	6370	4026	4012	5/12/1993	6/24/1993		I
30025318700000	CHEVRON	VGWU	WI-50	175	34E	35	328	FNL	1214	FEL	6288	4025	4011	5/22/1993	6/6/1993		I
30025318710000	CHEVRON	VGWU	WI-63	175	34E	35	1340	FNL	1090	FEL	6360	4024	4010	5/31/1993	6/15/1993		I
30025318720000	TEXACO	VGWU	WI-77	175	34E	35	2569	FSL	1226	FEL	6315	4024	4010	6/10/1993	6/25/1993		I
30025318730000	CHEVRON	VGWU	WI-91	175	34E	35	1459	FSL	1048	FEL	6315	4024	4010	6/19/1993	7/7/1993		I
30025318740000	CHEVRON	VGWU	WI-106	175	34E	36	310	FSL	2630	FEL	6280	4006	3992	5/5/1993	6/5/1993		I
30025318750000	CHEVRON	VGWU	WI-108	175	34E	36	213	FSL	351	FEL	6325	4000	3985	5/31/1993	6/21/1993		I
30025318760000	TEXACO	VGWU	WI-121	185	34E	1	964	FNL	90	FEL	6343	4000	3985	7/10/1993	8/8/1993		I
30025318770000	TEXACO	VGWU	WI-122	185	35E	6	845	FNL	1061	FWL	6373	3997	3983	8/21/1993	9/16/1993		I
30025318800000	TEXACO	VGWU	WI-105	175	34E	36	453	FSL	1340	FWL	6231	4000	3986	4/24/1993	5/20/1993		I
30025318840000	CHEVRON	VGWU	WI-107	175	34E	36	183	FSL	931	FEL	6390	4002	3988	5/14/1993	6/20/1993		I
30025319920000	TEXACO	NEW MEXICO L STATE	12	185	34E	1	1880	FNL	660	FEL	8000	3997	3983	7/24/1993	8/24/1993		P

## EXHIBIT C - Page 2

Wells within one half mile of the 18 VGWU injectors with added perforations outside the approved injection interval and TD >5900'.

UWI (API#)	Operator	Well Name	Well Number	Township	Range	Section	Spot NS Footage	Spot NS Dir	Spot EW Footage	Spot EW Dir	TD	ELEV KB	ELEV GR	SPUD_DATE	COMP_DATE	Plugged Date (If P&A'd)	Well Type
30025320080000	TEXACO	NEW MEXICO L STATE	14	18S	34E	1	810	FNL	1980	FEL	7950	4007	3993	10/4/1993	11/5/1993	P	
30025320090000	TEXACO	VGSAU	258	18S	34E	1	660	FNL	510	FEL	7950	4006	3992	8/27/1993	10/2/1993	P	
30025320160000	TEXACO	NEW MEXICO M STATE	9	18S	34E	1	660	FNL	2310	FWL	8100	4008	3994	1/25/1994	2/21/1994	P	
30025320340000	MARATHON	WARN STATE A/C-2	22	18S	35E	6	1219	FNL	890	FWL	8138	3990	3977	7/15/1993	8/25/1993	P	
30025322630000	CHEVRON	VGWU	98	17S	34E	35	937	FSL	532	FEL	6269	4022	4007	1/15/1994	2/8/1994	P	
30025322700000	CHEVRON	VGWU	70	17S	34E	35	2008	FNL	1668	FEL	6320	4026	4012	1/4/1994	1/30/1994	P	
30025322710000	CHEVRON	NEW MEXICO O STATE NCT-1	34	17S	34E	36	380	FSL	330	FEL	8000	4000	3986	12/5/1993	1/7/1994	P	
30025322980000	CHEVRON	STATE D	3	17S	35E	31	330	FSL	695	FWL	8049	4000	3986	11/23/1993	2/15/1994	P	
30025323380000	CHEVRON	VGWU	133	17S	34E	36	355	FSL	1875	FEL	8100	4005	3991	2/28/1994	3/28/1994	P	
30025323380100	CHEVRON	VGWU	133	17S	34E	36	355	FSL	1875	FEL	6895	4005	3991	4/6/2000	6/8/2000	P	
30025323390000	CHEVRON	NEW MEXICO O STATE NCT-1	36	17S	34E	36	330	FSL	2210	FWL	8100	4009	3995	2/9/1994	3/20/1994	P	
30025324380000	CONOCOPHILLIPS	SANTA FE	135	17S	35E	31	1743	FSL	808	FWL	8052	3995	3981	3/2/1994	5/19/1994	P	
30025324500000	TEXACO	VGWU	189	17S	34E	36	1650	FSL	330	FEL	8148	3998	3986	3/31/1994	5/3/1994	P	
30025326470000	MARATHON	MCCALLISTER STATE	11	17S	34E	25	1927	FSL	2134	FWL	10317	4026	4013	9/9/1994	10/25/1994	P	
30025326500000	BOGE, inc	STAPLIN STATE A/C-1	6	17S	35E	30	525	FSL	1980	FWL	10260	4005	3986	9/13/1994	10/26/1994	P	
30025328710000	TEXACO	NEW MEXICO 'L' STAT	WI-16	18S	34E	1	1310	FNL	10	FEL	8000	3999	3984	3/31/1995	5/9/1995	I	
30025331480000	CHEVRON	CVU 277	277	17S	34E	36	2085	FSL	710	FEL	11500	4004	3987	11/4/1995	1/11/1996	P	
30025333010000	TEXACO	NEW MEXICO L STATE	18	18S	34E	1	810	FNL	650	FEL	11500	4000	3982	4/17/1996	6/2/1996	P	
30025334290000	CHEVRON	VGWU	89	17S	34E	36	2000	FSL	1070	FEL	6300	4004	3988	6/5/1996	6/24/1996	P	
30025334340000	TEXACO	NEW MEXICO N STATE	10	17S	35E	30	800	FSL	510	FWL	11536	4007	3989	5/25/1996	8/15/1996	P	
30025335410000	MARATHON	WARN STATE A/C-2	26	18S	35E	6	2180	FNL	400	FWL	11500	3983	3967	11/26/1996	2/4/1997	P	
30025335690000	TEXACO	NEW MEXICO O STATE	39	17S	34E	36	2075	FNL	2110	FEL	10300	4016	3997	12/31/1996	6/16/1997	P	
30025335700000	CHEVRON	STATE BA	14	17S	34E	36	990	FNL	330	FEL	11500	4008	3991	9/10/1996	12/31/1995	P	
30025338500000	Chevron	NEW MEXICO 'Q' STATE	12	17S	34E	25	400	FSL	1900	FEL	10350	4018	3998	3/23/1997	5/15/1997	P	
30025339540000	MARATHON	MCCALLISTER STATE	12	17S	34E	25	1945	FSL	850	FWL	11270	4027	4008	5/23/1997	7/22/1997	P	
30025349450000	CHEVRON	STATE BA	15	17S	34E	36	612	FNL	2135	FWL	10500	4017	4005	4/21/2000	7/16/2000	P	
30025379710000	XTO ENERGY	VACUUM NORTH ABO UN	305	17S	34E	26	2600	FSL	2630	FEL	9145	4040	4022	7/3/2006	10/18/2006	P	
30025381400000	CHEVRON	NM O STATE NCT-1	40	17S	34E	36	1885	FSL	1978	FEL	13300	4019	3994	1/19/2007	5/7/2007	I	
30025396940000	XTO	NVAU	308H	17S	34E	26	380	FSL	350	FEL	13365	4010	4010	4/2/2010	7/24/2010	P	

*EXHIBIT D*

API	Lease	Well #	Status	Max Daily Rate (BWPD)	EST Average Injection Pressure (PSI)	Injection Surf Pressure Limit (PSI)	Maximum Surf Pressure (PSI)
3002531835	VGWU	9	Active	345	1075	1200	1200
3002531869	VGWU	27	Active	1195	785	1200	1200
3002531784	VGWU	28	Active	1000	990	1200	1200
3002531699	VGWU	38	Active	125	1895	2000	2000
3002531700	VGWU	39	Active	2550	1035	2000	2000
3002531701	VGWU	40	TA	975	1785	2000	2000
3002531838	VGWU	41	Active	720	1345	2000	2000
3002531815	VGWU	42	Active	350	1725	2000	2000
3002531870	VGWU	50	Active	1210	1420	2000	2000
3002531728	VGWU	51	Active	250	1874	2000	2000
3002531702	VGWU	52	Active	2212	960	2000	2000
3002531703	VGWU	53	Active	2010	1770	2000	2000
3002531816	VGWU	54	Active	265	645	2000	2000
3002531704	VGWU	64	Active	2840	1120	2000	2000
3002531705	VGWU	65	Active	1170	1590	2000	2000
3002531872	VGWU	77	Active	1845	1035	2000	2000
3002531858	VGWU	104	Active	1040	1180	2200	2200
3002531884	VGWU	107	Active	700	1650	1750	1750

## Affidavit of Publication

State of New Mexico,  
County of Eddy, ss.

Kathy McCarroll, being first duly sworn,  
on oath says:

That she is the Classified Supervisor of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

July 30 2014

That the cost of publication is \$185.31 and that payment thereof has been made and will be assessed as court costs.

Kathy M. Carroll

Subscribed and sworn to before me this

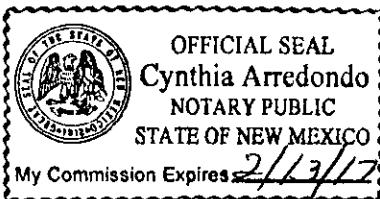
4 day of August, 2014

Cynthia Arredondo

My commission Expires

2/13/17

Notary Public



<p><b>July 30, 2014</b></p> <p><b>LEGAL NOTICE</b> July 24, 2014</p> <p>Notice is hereby given of the application of CHEVRON U.S.A. INC.,</p> <p>15 Smith Road, Midland, TX 79705, to Oil Conservation of the State of New Mexico, and the Commissioner of Public Lands, State of New Mexico for the approval to amend the injection depths for the Vacuum Glorieta West Unit #9, 27, 28, 38, 39, 40, 41, 42, 50, 51, 52, 53, 54, 64, 65, 77, 104 and 107. These wells are in the following locations in Lea County, New Mexico:</p> <table border="1"> <thead> <tr> <th>Well #</th> <th>Sec-Twn-Rnge</th> <th>Unit Letter</th> <th>Surface Location</th> <th>Bottom Hole Location</th> </tr> </thead> <tbody> <tr> <td>VGWU 9</td> <td>25-17S-34E</td> <td>C</td> <td>73FNL &amp; 141FWL</td> <td>73FNL &amp; 141FWL</td> </tr> <tr> <td>VGWU 27</td> <td>26-17S-34E</td> <td></td> <td>2359FSL &amp; 64FEL</td> <td>2359FSL &amp; 64FEL</td> </tr> <tr> <td>VGWU 28</td> <td>25-17S-34E</td> <td>L</td> <td>2304FSL &amp; 127FWL</td> <td>2304FSL &amp; 127FWL</td> </tr> <tr> <td>VGWU 38</td> <td>25-17S-34E</td> <td>M</td> <td>1217FSL &amp; 24FWL</td> <td>1217FSL &amp; 24FWL</td> </tr> <tr> <td>VGWU 39</td> <td>25-17S-34E</td> <td>M</td> <td>1194FSL &amp; 1055FWL</td> <td>1194FSL &amp; 1055FWL</td> </tr> <tr> <td>VGWU 40</td> <td>25-17S-34E</td> <td>K</td> <td>1590FSL &amp; 2404FWL</td> <td>1590FSL &amp; 2404FWL</td> </tr> <tr> <td>VGWU 41</td> <td>25-17S-34E</td> <td>J</td> <td>1377FSL &amp; 1646FEL</td> <td>1377FSL &amp; 1646FEL</td> </tr> <tr> <td>VGWU 42</td> <td>30-17S-35E</td> <td>M</td> <td>1114FSL &amp; 41FWL</td> <td>1114FSL &amp; 41FWL</td> </tr> <tr> <td>VGWU 50</td> <td>35-17S-34E</td> <td>A</td> <td>328FNL &amp; 1214FEL</td> <td>328FNL &amp; 1214FEL</td> </tr> <tr> <td>VGWU 51</td> <td>35-17S-34E</td> <td>A</td> <td>24FNL &amp; 101FEL</td> <td>24FNL &amp; 101FEL</td> </tr> </tbody> </table> <p>Water will be injected into the Glorieta and Paddock formations of the Vacuum Glorieta West field. Water injection in each well will be at an expected maximum rate of 3,000 barrels of water per day and an expected maximum surface pressure of 2,200 psi. For additional information, please contact Sean Anderson, at 432-687-7523, or the project engineer, Sean Heaster, 432-687-7366, at Chevron U.S.A., 15 Smith Road, Midland, TX 79705.</p> <p>Interested Parties must file objectives or requests for hearing with the Oil Conservation Division, 1220 South St. Drive, Santa Fe, NM 87505, within 15 days of this notice.</p>	Well #	Sec-Twn-Rnge	Unit Letter	Surface Location	Bottom Hole Location	VGWU 9	25-17S-34E	C	73FNL & 141FWL	73FNL & 141FWL	VGWU 27	26-17S-34E		2359FSL & 64FEL	2359FSL & 64FEL	VGWU 28	25-17S-34E	L	2304FSL & 127FWL	2304FSL & 127FWL	VGWU 38	25-17S-34E	M	1217FSL & 24FWL	1217FSL & 24FWL	VGWU 39	25-17S-34E	M	1194FSL & 1055FWL	1194FSL & 1055FWL	VGWU 40	25-17S-34E	K	1590FSL & 2404FWL	1590FSL & 2404FWL	VGWU 41	25-17S-34E	J	1377FSL & 1646FEL	1377FSL & 1646FEL	VGWU 42	30-17S-35E	M	1114FSL & 41FWL	1114FSL & 41FWL	VGWU 50	35-17S-34E	A	328FNL & 1214FEL	328FNL & 1214FEL	VGWU 51	35-17S-34E	A	24FNL & 101FEL	24FNL & 101FEL	<p><b>VGWU 52</b> 25-17S-34E N 214FSL &amp; 1630FWL 214FSL &amp; 1630FWL</p> <p><b>VGWU 53</b> 25-17S-34E N 215FSL &amp; 2350FWL 215FSL &amp; 2350FWL</p> <p><b>VGWU 54</b> 36-17S-34E B 51FNL &amp; 1588FEL 51FNL &amp; 1588FEL</p> <p><b>VGWU 64</b> 36-17S-34E E 148FNL &amp; 204FWL 148FNL &amp; 204FWL</p> <p><b>VGWU 65</b> 36-17S-34E F 1522FNL &amp; 1492FWL 1522FNL &amp; 1492FWL</p> <p><b>VGWU 77</b> 35-17S-34E I 2569FSL &amp; 1226FEL 2569FSL &amp; 1226FEL</p> <p><b>VGWU 104</b> 36-17S-34E M 361FSL &amp; 300FWL 361FSL &amp; 300FWL</p> <p><b>VGWU 107</b> 36-17S-34E P 183FSL &amp; 931FEL 183FSL &amp; 931FEL</p>
Well #	Sec-Twn-Rnge	Unit Letter	Surface Location	Bottom Hole Location																																																				
VGWU 9	25-17S-34E	C	73FNL & 141FWL	73FNL & 141FWL																																																				
VGWU 27	26-17S-34E		2359FSL & 64FEL	2359FSL & 64FEL																																																				
VGWU 28	25-17S-34E	L	2304FSL & 127FWL	2304FSL & 127FWL																																																				
VGWU 38	25-17S-34E	M	1217FSL & 24FWL	1217FSL & 24FWL																																																				
VGWU 39	25-17S-34E	M	1194FSL & 1055FWL	1194FSL & 1055FWL																																																				
VGWU 40	25-17S-34E	K	1590FSL & 2404FWL	1590FSL & 2404FWL																																																				
VGWU 41	25-17S-34E	J	1377FSL & 1646FEL	1377FSL & 1646FEL																																																				
VGWU 42	30-17S-35E	M	1114FSL & 41FWL	1114FSL & 41FWL																																																				
VGWU 50	35-17S-34E	A	328FNL & 1214FEL	328FNL & 1214FEL																																																				
VGWU 51	35-17S-34E	A	24FNL & 101FEL	24FNL & 101FEL																																																				



## RECEIVED OOD

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**Sean Anderson**  
Production Engineering  
Technical Assistant

**MidContinent/Alaska SBU**

Chevron North America  
Exploration and Production  
Company  
15 Smith Road  
Midland, TX 79705  
Tel 432-687-7532  
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[Sean.anderson@chevron.com](mailto:Sean.anderson@chevron.com)

September 29, 2014

**New Mexico Oil Conservation Division**  
**1220 South St. Francis Drive**  
**Santa Fe, New Mexico 87505**

RE: Application for Authorization to Inject C-108  
Oil and Gas Engineering Department

Chevron U.S.A. Inc. respectfully request administrative approval to amend the injection depths for the Vacuum Glorieta West Unit #9, 27, 28, 38, 39, 40, 41, 42, 50, 51, 52, 53, 54, 64, 65, 77, 104 and 107. These wells are in the following locations in Lea County, New Mexico:

Well #	Sec-Twn-Rnge	Unit Letter	Surface Location	Bottom Hole Location
VGWU 9	25-17S-34E	C	73FNL & 1411FWL	73FNL & 1411FWL
VGWU 27	26-17S-34E	I	2359FSL & 64FEL	2359FSL & 64FEL
VGWU 28	25-17S-34E	L	2304FSL & 1127FWL	2304FSL & 1127FWL
VGWU 38	25-17S-34E	M	1217FSL & 24FWL	1217FSL & 24FWL
VGWU 39	25-17S-34E	M	1194FSL & 1055FWL	1194FSL & 1055FWL
VGWU 40	25-17S-34E	K	1590FSL & 2404FWL	1590FSL & 2404FWL
VGWU 41	25-17S-34E	J	1377FSL & 1646FEL	1377FSL & 1646FEL
VGWU 42	30-17S-35E	M	1114FSL & 41FWL	1114FSL & 41FWL
VGWU 50	35-17S-34E	A	328FNL & 1214FEL	328FNL & 1214FEL
VGWU 51	35-17S-34E	A	24FNL & 101FEL	24FNL & 101FEL
VGWU 52	25-17S-34E	N	214FSL & 1630FWL	214FSL & 1630FWL
VGWU 53	25-17S-34E	N	215FSL & 2350FWL	215FSL & 2350FWL
VGWU 54	36-17S-34E	B	51FNL & 1588FEL	51FNL & 1588FEL
VGWU 64	36-17S-34E	E	148FNL & 204FWL	148FNL & 204FWL
VGWU 65	36-17S-34E	F	1522FNL & 1492FWL	1522FNL & 1492FWL
VGWU 77	35-17S-34E	I	2569FSL & 1226FEL	2569FSL & 1226FEL
VGWU 104	36-17S-34E	M	361FSL & 300FWL	361FSL & 300FWL
VGWU 107	36-17S-34E	P	183FSL & 931FEL	183FSL & 931FEL

Water will be injected into the Glorieta and Paddock formations of the Vacuum Glorieta West field. Water injection in each well will be at an expected maximum rate of 3,000 barrels of water per day and an expected maximum surface pressure of 2,200 psi.

Attached is an OCD form C-108 with information relative to the wells in question. A copy of the legal notice posted in the Carlsbad Current Argus is included.

If additional information is required, please contact Sean Anderson, at 432-687-7523, or the project engineer, Sean Heaster, at 432-687-7366.

**Interested Parties must file objectives or requests for hearing with the Oil Conservation Division, 1220 South St. Drive, Santa Fe, NM 87505, within 15 days of this notice.**

Sincerely,



Sean Anderson  
NM PE Technical Assistant  
Enclosure

cc: NMOCD – District 1, Hobbs

Sean Heaster  
Ryan Warmke  
Nick Moschetti  
Denise Pinkerton



September 29, 2014

**Sean Anderson**  
Production Engineering  
Technical Assistant

**MidContinent/Alaska SBU**  
Chevron North America  
Exploration and Production  
Company  
15 Smith Road  
Midland, TX 79705  
Tel 432-687-7532  
Fax 432-687-7871  
Sean.anderson@chevron.com

**RE: Application for Authorization to Inject C-108**

Offset Operators, Leaseholders and Working Interest Owners:

For your information, as an offset operator, leaseholder or working interest owner, Chevron North America, as operator of the wells mentioned below, has filed an application with the New Mexico Oil Conservation Division to amend the injection depths for the Vacuum Glorieta West Unit #9, 27, 28, 38, 39, 40, 41, 42, 50, 51, 52, 53, 54, 64, 65, 77, 104 and 107. These wells are in the following locations in Lea County, New Mexico:

Well #	Sec-Twn-Rnge	Unit Letter	Surface Location	Bottom Hole Location
VGWU 9	25-17S-34E	C	73FNL & 1411FWL	73FNL & 1411FWL
VGWU 27	26-17S-34E	I	2359FSL & 64FEL	2359FSL & 64FEL
VGWU 28	25-17S-34E	L	2304FSL & 1127FWL	2304FSL & 1127FWL
VGWU 38	25-17S-34E	M	1217FSL & 24FWL	1217FSL & 24FWL
VGWU 39	25-17S-34E	M	1194FSL & 1055FWL	1194FSL & 1055FWL
VGWU 40	25-17S-34E	K	1590FSL & 2404FWL	1590FSL & 2404FWL
VGWU 41	25-17S-34E	J	1377FSL & 1646FEL	1377FSL & 1646FEL
VGWU 42	30-17S-35E	M	1114FSL & 41FWL	1114FSL & 41FWL
VGWU 50	35-17S-34E	A	328FNL & 1214FEL	328FNL & 1214FEL
VGWU 51	35-17S-34E	A	24FNL & 101FEL	24FNL & 101FEL
VGWU 52	25-17S-34E	N	214FSL & 1630FWL	214FSL & 1630FWL
VGWU 53	25-17S-34E	N	215FSL & 2350FWL	215FSL & 2350FWL
VGWU 54	36-17S-34E	B	51FNL & 1588FEL	51FNL & 1588FEL
VGWU 64	36-17S-34E	E	148FNL & 204FWL	148FNL & 204FWL
VGWU 65	36-17S-34E	F	1522FNL & 1492FWL	1522FNL & 1492FWL
VGWU 77	35-17S-34E	I	2569FSL & 1226FEL	2569FSL & 1226FEL
VGWU 104	36-17S-34E	M	361FSL & 300FWL	361FSL & 300FWL
VGWU 107	36-17S-34E	P	183FSL & 931FEL	183FSL & 931FEL

Water will be injected into the Glorieta and Paddock formations of the Vacuum Glorieta West field. Water injection in each well will be at an expected maximum rate of 3,000 barrels of water per day and an expected maximum surface pressure of 2,200 psi.

Attached is an OCD form C-108 with information relative to the wells in question. A copy of the legal notice posted in the Carlsbad Current Argus is included.

If additional information is required, please contact Sean Anderson, at 432-687-7523, or the project engineer, Sean Heaster, at 432-687-7366.

**Interested Parties must file objectives or requests for hearing with the Oil Conservation Division, 1220 South St. Drive, Santa Fe, NM 87505, within 15 days of this notice.**

Sincerely,



Sean Anderson  
NM PE Technical Assistant

Enclosure

cc: Sean Heaster

# **NOTIFICATION LIST**

**Prepared 8/13/2014 by Daniel Pequeno, Senior Land Representative**

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

## **Offset Operators, Leaseholders, Working Interest Owners**

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

Diamond S Energy Co.  
6608 Bryant Irvin Rd.  
Fort Worth, TX 76132

Apache Corporation  
303 Veterans Airpark Lane, Suite 30000  
Midland, TX 79705

Boge, Inc.  
6304 CR 7430  
Lubbock, TX 79424

Marathon Oil Company  
5555 San Felipe  
Mail Stop #3308  
Houston, Texas 77056

McGowan Working Partners  
P.O. Box 55809  
Jackson, MS 39296-5809  
Attn.: Mr. David Russell

Cimarex Energy Co  
202 S Cheyenne Ste 1000  
Tulsa, OK 74103-4346

Oxy USA Inc.  
6 Desta Drive  
Midland, TX 79705

ConocoPhillips Petroleum Co.  
Attn.: Permian Land Dept.  
PO BOX 2197  
Houston, TX 77252-2197

XTO Energy Inc.  
Attn.: Permian Land  
810 Houston Street  
Fort Worth, Texas 76102

Cross Timbers Energy LLC  
Attn.: Justin Neeley - Land  
400 West Seventh Street  
Fort Worth, TX 76102

## **Surface Owner**

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

Signed By: Daniel Pequeno (signed)  
Daniel Pequeno, Landman

Date: August 13, 2014

Petrel Web View (VACUUM GLORETA WEST (UNIT 07))

Close Edit Data... Sync... Audit... Other Add Ins Help

Reports Schematic Wellload Time Tracks Days vs Depth

Jobs Zoom P:

Stim - Acid Non Energized, 6/16/2006 00:00 New... 100% 1

PU SNIVEL BROKE CIRC, C/O FILL FROM 5873' TO 6160', (SOFT IRON SULFITE)  
TOH W/ 192 JTS 2 7/8" WS & LD BIT.  
PU 5 1/2" X 2 3/8" X 6.53 TS RBP, 5 1/2" X 2 3/8" X 6.29 HD PKR, 2 3/8" X 2 7/8" X .4".  
LOAD & TEST 5 1/2" CSG TO 6000' 15-MIN NO LOSS, RBP SET @ 5820'.  
TOH W/ RBP & PKR.  
TIH W/ 61 JTS 2 7/8" TBG W/ 2 7/8" WS & 2 7/8" NOTCH COLLAR 1956'.  
SHUT DN PREP TO PLUG BACK W/ 31-100# SX 20/40 GRADY SAND 6160'.  
Report Start Date: 6/21/2006

TRAVEL TIME, SAFETY MTG, REVIEW JSAS.  
CONTINUE TIH W/ 2 7/8" WS TO 5163' W/ 161 JTS IN HOLE.  
DUMP 32 SX 20/40 BRADY SAND.  
SHUT IN HOLE TO ALLOW SAND TO FALL.  
TAG SAND @ 6021'.  
TOH W/ 2 7/8" TBG & NOTCH COLLAR.  
MIRU SCHLUMBERGER WIRE LINE.  
1ST RUN TIH W/ 3 1/8" GUNS 4 SPF W/ 120 DEGREES PHASING (TAG SAND @ 5840')  
2ND RUN 3 1/8" GUNS 4 SPF 120 DEGREES PHASING 5873' TO (5877' 16 HOLES)  
3RD RUN 3 1/8" GUNS 4 SPF 120 DEGREES PHASING (5840' TO 5844' 16 HOLES)  
RIG DN SCHLUMBERGER.  
SHUT DOWN DUE TO LIGHTING.  
SHUT.DN PREP TO RUN PFS & STIM.

Report Start Date: 6/22/2006

TRAVEL TIME, SAFETY MTG, REVIEW JSAS.  
SAFETY MTG, MIRU SCHLUMBERGER WIRE LINE

Global D&C Reports  
Global Base Business Reports  
Mid Con  
Summary Reports  
BHA Summary  
Costing Summary  
Completion Summary  
Comp\_WO AFE vs Actual Time & Cost  
Cost Summary - Graph  
Daily Activity and Cost Summary  
Days vs Depth and Cost - Graph  
Drilling Summary 3  
MCBU Phase Summary Graph  
Safety Board  
MCBU Reports  
MCBU Drilling Report  
MCBU Completion & WO Report  
Daily Cost Summary - Legal  
MCBU 'Outside' Drilling Report  
MCBU Compl & WO 'Outside' Report  
EOW Drilling Report  
EOW Completion Report  
EOW Schematic  
EOW AFE vs Field Estimate Costs  
EOW Days & Cost Graph

Sean Heaster  
PE, Vacuum Tech Team

**From:** Goetze, Phillip, EMNRD [mailto:[Phillip.Goetze@state.nm.us](mailto:Phillip.Goetze@state.nm.us)]  
**Sent:** Tuesday, March 04, 2014 6:17 PM  
**To:** Heaster, Sean P  
**Cc:** Brown, Maxey G, EMNRD  
**Subject:** RE: VGWU 65 (30-025-31705)

Sean:

Need some help on the #77. Your C-103 dated 06-29-2006 notes that last perfs shot at 5840-5844 and this is also shown on your well completion diagram. So – is this correct that your shallowest perf in the wells is 5840 ft and not 5,911 ft? If so, this may be a different issue – another type of letter to the well case file on clarification and some research on my part. Would appreciate the input. PRG

Phillip R. Goetze, P.G.  
 Engineering and Geological Services Bureau, Oil Conservation Division  
 1220 South St. Francis Drive, Santa Fe, NM 87505  
 O: 505.476.3466 F: 505.476.3462  
[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

**To:** Heaster, Sean P  
**Cc:** Brown, Maxey G, EMNRD  
**Subject:** VGWU 77 Perfs

Sean and Maxey:

So pre 2006, VGWU #77 had perfs from 5911 ft to 6020 ft; then after the workover the perfs are from 5840 ft to 6020 ft. This puts a new light on the subject manner. The issuance for an exception to the 100-foot distance is no longer the compliance issue – it's a change in the perf interval in 2006. The upper packer at 5801 ft is within 100 ft of the current upper perf of 5840 ft. Now I need to find the paper trail for the addition of the perfs in 2006. If I can't, then will look at an administrative amendment to the order. Additions of perfs within the approved injection interval is considered a major modification, so it needs to be addressed.

Sean:

I need you to look through your wells in the VGWU to see if there are any additional changes in perf intervals – have there been any other wells in the 2006 workover cycle that new perfs are added? Please check. And call with any questions (afternoon). PRG

Maxey:

I am burning my morning in a meeting with another operator. I will give you a call and we can discuss what I see is a fix. Is there a time today (after 10) that I can reach you? Thanks. PRG

**Phillip R. Goetze, P.G.**  
Engineering and Geological Services Bureau, Oil Conservation Division  
1220 South St. Francis Drive, Santa Fe, NM 87505  
O: 505.476.3466 F: 505.476.3462  
[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

---

**From:** Heaster, Sean P [<mailto:SHeaster@chevron.com>]  
**Sent:** Wednesday, March 05, 2014 5:39 AM  
**To:** Goetze, Phillip, EMNRD  
**Cc:** Brown, Maxey G, EMNRD  
**Subject:** RE: VGWU 65 (30-025-31705)  
**Importance:** High

Phillip,

That is correct, we did do a workover in 2006 on VGWU 77 which added perforations from 5,840-5,927'. Please see the picture from wellview below.

## **Goetze, Phillip, EMNRD**

---

**From:** Goetze, Phillip, EMNRD  
**Sent:** Thursday, March 27, 2014 9:39 AM  
**To:** 'Heaster, Sean P'  
**Cc:** Brown, Maxey G, EMNRD; Kautz, Paul, EMNRD; Ezeanyim, Richard, EMNRD  
**Subject:** VGWU 77 Perfs and All The Others  
**Attachments:** VGWU Injection Wells w New Perfs.xlsx

Sean:

Sorry for the delay in response. I have gone through the information you provided regarding the Vacuum-Glorieta West Unit. The attached list is the Chevron data reorganized for the proposed resolution. My review of the well information and your project description shows:

1. There are 20 wells that perforations were extended.
2. Of the 20, 18 have perfs that extend above the approved injection interval described in Ordering Paragraph (1) of R-9714, but within the definition of the of R-9710.
3. The added perfs are consistent with the stratigraphic section described in the vertical limits of Ordering Paragraph (3) of Order R-9710 (which approved the establishment of the statutory unit).
4. Chevron will continue to use the double packer system, so the packers in these wells will continue to exceed the 100-foot limit.
5. Expansion of the perfs represents a major modification that requires notification.

The present situation with Ordering Paragraph (1) of R-9714 will result in a minimum of 18 packer setting exceptions and probably a few modifications to the exceptions after every work over. What I am proposing is for Chevron to apply for a WFX (C-108 application)under R-9714 using the exiting information you have created for the 20 VGWU wells. That would include the information from the summary table I have attached. Chevron would be required to do notification for the application. I doubt there would be any protest and this would satisfy the requirements under the UIC program to prevent Chevron from losing injection authority. And with the WFX, all the injection intervals would be covered with no need for numerous exception. Chevron should also consider including in the application any other wells that will have additional perfs in the near future. Meanwhile, the wells will continue to operate in their current status quo. I have presented this proposal to OCD staff of District I and they are in concurrence with this solution. Please contact me with any questions, e-mail is probably the best route to give me a heads up. PRG

Phillip R. Goetze, P.G.  
Engineering and Geological Services Bureau, Oil Conservation Division  
1220 South St. Francis Drive, Santa Fe, NM 87505  
O: 505.476.3466 F: 505.476.3462  
[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

---

**From:** Heaster, Sean P [mailto:[SHeaster@chevron.com](mailto:SHeaster@chevron.com)]

**Sent:** Thursday, March 13, 2014 7:55 AM

**To:** Goetze, Phillip, EMNRD  
**Cc:** Brown, Maxey G, EMNRD  
**Subject:** RE: VGWU 77 Perfs  
**Importance:** High

Phillip,

Sorry for the delay in getting you this information. I wanted to make sure all the information was correct and accurate. Please see the attached excel spreadsheet with our current injection wells for the VGWU lease.

I've included everything I've found since 2005 and a few additional add pay I've found even earlier.

Let me know if there is anything else I can do to help out. Thanks!

Sean Heaster  
PE, Vacuum Tech Team

---

**From:** Goetze, Phillip, EMNRD [mailto:[Phillip.Goetze@state.nm.us](mailto:Phillip.Goetze@state.nm.us)]

**Sent:** Wednesday, March 05, 2014 10:24 AM

**To:** Heaster, Sean P

**Cc:** Brown, Maxey G, EMNRD

**Subject:** VGWU 77 Perfs

Sean and Maxey:

So pre 2006, VGWU #77 had perfs from 5911 ft to 6020 ft; then after the workover the perfs are from 5840 ft to 6020 ft. This puts a new light on the subject manner. The issuance for an exception to the 100-foot distance is no longer the compliance issue – it's a change in the perf interval in 2006. The upper packer at 5801 ft is within 100 ft of the current upper perf of 5840 ft. Now I need to find the paper trail for the addition of the perfs in 2006. If I can't, then will look at an administrative amendment to the order. Additions of perfs within the approved injection interval is considered a major modification, so it needs to be addressed.

Sean:

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Maxey:

I am burning my morning in a meeting with another operator. I will give you a call and we can discuss what I see is a fix. Is there a time today (after 10) that I can reach you? Thanks. PRG

Phillip R. Goetze, P.G.

Engineering and Geological Services Bureau, Oil Conservation Division

1220 South St. Francis Drive, Santa Fe, NM 87505

O: 505.476.3466      F: 505.476.3462

[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

---

**From:** Heaster, Sean P [mailto:[SHeaster@chevron.com](mailto:SHeaster@chevron.com)]

**Sent:** Wednesday, March 05, 2014 5:39 AM

**To:** Goetze, Phillip, EMNRD

**Cc:** Brown, Maxey G, EMNRD

**Subject:** RE: VGWU 65 (30-025-31705)

**Importance:** High

Phillip,

That is correct, we did do a workover in 2006 on VGWU 77 which added perforations from 5,840-5,927'. Please see the picture from wellview below.

Petition WellView (VACUUM GLORIETTA WEST UNIT 077)

Close Edit Data Sync Audit Other Add-ins Help

Reports Schematic Wellhead Time Tracks Days vs Depth

Employees Jobs Zoom Page Print Refresh E

Stim - Acid Non Energized, 6/16/2006 00:00 New... 100% 1/2

PU SWIVEL BROKE CIRC, C/O FILL FROM 5873' TO 5160'. (SOFT IRON SULFITE SCALE). CIRC CLEAN & LD SWIVEL  
TOH W/ 192 JTS 2 7/8" WS & LD BIT.  
PU 5 1/2" X 2 3/8" X 6.53' TS RBP, 5 1/2" X 2 3/8" X 6.29' HD PKR, 2 3/8" X 2 7/8" X .42" XO BOX, 2 7/8" X 1.10 SN, 180 JT.  
LOAD & TEST 5 1/2" CSG TO 5009' 15-MIN NO LOSS. RBP SET @ 5820'.  
TOH W/ RBP & PKR.  
TIH W/ 61 JTS 2 7/8" TBG W/ 2 7/8" WS & 2 7/8" NOTCH COLLAR 1956'.  
SHUT DN PREP TO PLUG BACK W/ 31-100# SX 2040 GRADY SAND 6180' TO 5940' & PERF  
Report Start Date: 6/21/2006

TRAVEL TIME, SAFETY MTG, REVIEW JSAs.  
CONTINUE TIH W/ 2 7/8" WS TO 5163' W/ 161 JTS IN HOLE.  
DUMP 32 SX 2040 BRADY SAND.  
SHUT IN HOLE TO ALLOW SAND TO FALL.  
TAG SAND @ 6021'.  
TOH W/ 2 7/8" TBG & NOTCH COLLAR.  
MIRU SCHLUMBERGER WIRE LINE.  
1ST RUN TIH W/ 3 1/8" GUNS 4 SPF W/ 120 DEGREES PHASING (TAG SAND @ 5952') (5902' TO 5906' 16 HOLES)  
2ND RUN 3 1/8" GUNS 4 SPF 120 DEGREES PHASING 5873' TO (5877' 16 HOLES) (5881' TO 5885' 16 HOLES).  
3RD RUN 3 1/8" GUNS 4 SPF 120 DEGREES PHASING (5840' TO 5844' 16 HOLES) (5853' TO 5860' 28 HOLES). TOT  
RIG DN SCHLUMBERGER.  
SHUT DOWN DUE TO LIGHTNING  
SHUT DN PREP TO RUN PFS & STIM  
Report Start Date: 6/22/2006

TRAVEL TIME, SAFETY MTG, REVIEW JSAs.  
SAFETY MTG, MIRU 11 SP-341 ISOKER/EP WIRE LINE.

Sean Heaster  
PE, Vacuum Tech Team

**From:** Goetze, Phillip, EMNRD [mailto:[Phillip.Goetze@state.nm.us](mailto:Phillip.Goetze@state.nm.us)]  
**Sent:** Tuesday, March 04, 2014 6:17 PM  
**To:** Heaster, Sean P  
**Cc:** Brown, Maxey G, EMNRD  
**Subject:** RE: VGWU 65 (30-025-31705)

Sean:

Need some help on the #77. Your C-103 dated 06-29-2006 notes that last perfs shot at 5840-5844 and this is also shown on your well completion diagram. So – is this correct that your shallowest perf in the wells is 5840 ft and not 5,911 ft? If so, this may be a different issue – another type of letter to the well case file on clarification and some research on my part. Would appreciate the input. PRG

Phillip R. Goetze, P.G.  
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 1220 South St. Francis Drive, Santa Fe, NM 87505  
 O: 505.476.3466 F: 505.476.3462  
[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

**From:** Heaster, Sean P [mailto:[SHeaster@chevron.com](mailto:SHeaster@chevron.com)]  
**Sent:** Tuesday, March 04, 2014 3:08 PM  
**To:** Goetze, Phillip, EMNRD  
**Subject:** VGWU 65 (30-025-31705)

Hey Phillip,

We are currently rigged up on VGWU 65 for a recent MIT failure. They found a hole in the 181<sup>st</sup> joint of injection tubing. It appears we will have to set the packer above the 100' limit for this one as well. I talked to our well site manager this afternoon and it looks like he got the packer to hold 122' above the top perf. Can you please review this along with the VGWU 77 and make a recommendation. After we rig off the well, we will keep it shut in until further notice from the NMOCD. Thanks!

**Sean P. Heaster**, Production Engineer  
Vacuum Field Operations  
**Chevron N.A. Exploration and Production Co.**  
Mid-Continent Business Unit  
15 Smith Road, Midland, TX 79705  
Office (432) 687-7366 Cell (432) 640-9031

## **Goetze, Phillip, EMNRD**

---

**From:** Ingram, Scott (ScottIngram) <ScottIngram@chevron.com>  
**Sent:** Thursday, April 03, 2014 9:24 AM  
**To:** Goetze, Phillip, EMNRD  
**Cc:** Heaster, Sean P; Anderson, Sean  
**Subject:** Chevron's Pending Vacuum Glorieta West Unit WFX - C-108 Application

Good morning Mr. Goetze,

Per your recommendation in last Thursday's (3/27) Email, Chevron is initiating a waterflood expansion application to address our Vacuum Glorieta West Unit (VGWU) injection wells where we have recently learned we added perforations within the unitized interval (Unitization Order R-9710) but outside of the injection interval (Waterflood Injection Order R-9714).

I have two related questions: First, from the instructions in your Email, we understand that we should submit an expansion C-108; however since these are existing injectors, which have already been vetted through the review process resulting in injection order R-9714, what are the normal requirements for a new C-108 that are not necessary this time? We understand that we can reference R-9710 and R-9714 and then eliminate much, if not all, of the required data referenced in sections VI, VIII, X and XI, but we wanted to align expectations with you in advance so that we provide you everything that is required while avoiding unnecessary efforts generating items not required. More specifically, since these 18 wells are scattered across the majority of the VGWU, we calculate that within their collective ½ mile radii of review there are roughly 400 wells which penetrate the proposed injection zone - Is it necessary to provide data under section VI for these 400 wells?

Secondly, unless we identify all other VGWU injectors, it is essentially impossible to predict which VGWU injectors we might want to add perfs to in the future which would fall outside the current injection order interval; therefore, is there any verbiage that could be included in this waterflood expansion application that could cover this eventuality for all the remaining VGWU wells?

Thank you for your time and consideration.

Sincerely, Scott Ingram

**Scott M. Ingram**  
Consulting Earth Scientist  
Mid-Continent Business Unit  
Chevron North America E & P  
15 Smith Road, Midland, Tx. 79705  
432-687-7212 office 432-238-3479 mobile  
*scotttingram@chevron.com*

**God Bless America**

CONFIDENTIALITY NOTICE: This message may be confidential and privileged. If you believe this email has been sent to you in error, please reply to the sender that you received the message then please destroy this email.

---

**From:** Goetze, Phillip, EMNRD [mailto:[Phillip.Goetze@state.nm.us](mailto:Phillip.Goetze@state.nm.us)]  
**Sent:** Thursday, March 27, 2014 10:39 AM  
**To:** Heaster, Sean P  
**Cc:** Brown, Maxey G, EMNRD; Kautz, Paul, EMNRD; Ezeanyim, Richard, EMNRD  
**Subject:** VGWU 77 Perfs and All The Others

Sean:

Sorry for the delay in response. I have gone through the information you provided regarding the Vacuum-Glorieta West Unit. The attached list is the Chevron data reorganized for the proposed resolution. My review of the well information and your project description shows:

1. There are 20 wells that perforations were extended.
2. Of the 20, 18 have perfs that extend above the approved injection interval described in Ordering Paragraph (1) of R-9714, but within the definition of the of R-9710.
3. The added perfs are consistent with the stratigraphic section described in the vertical limits of Ordering Paragraph (3) of Order R-9710 (which approved the establishment of the statutory unit).
4. Chevron will continue to use the double packer system, so the packers in these wells will continue to exceed the 100-foot limit.
5. Expansion of the perfs represents a major modification that requires notification.

The present situation with Ordering Paragraph (1) of R-9714 will result in a minimum of 18 packer setting exceptions and probably a few modifications to the exceptions after every work over. What I am proposing is for Chevron to apply for a WFX (C-108 application) under R-9714 using the exiting information you have created for the 20 VGWU wells. That would include the information from the summary table I have attached. Chevron would be required to do notification for the application. I doubt there would be any protest and this would satisfy the requirements under the UIC program to prevent Chevron from losing injection authority. And with the WFX, all the injection intervals would be covered with no need for numerous exception. Chevron should also consider including in the application any other wells that will have additional perfs in the near future. Meanwhile, the wells will continue to operate in their current status quo. I have presented this proposal to OCD staff of District I and they are in concurrence with this solution. Please contact me with any questions, e-mail is probably the best route to give me a heads up. PRG

Phillip R. Goetze, P.G.  
Engineering and Geological Services Bureau, Oil Conservation Division  
1220 South St. Francis Drive, Santa Fe, NM 87505  
O: 505.476.3466 F: 505.476.3462  
[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

---

**From:** Heaster, Sean P [<mailto:SHeaster@chevron.com>]  
**Sent:** Thursday, March 13, 2014 7:55 AM  
**To:** Goetze, Phillip, EMNRD  
**Cc:** Brown, Maxey G, EMNRD  
**Subject:** RE: VGWU 77 Perfs  
**Importance:** High

Phillip,

Sorry for the delay in getting you this information. I wanted to make sure all the information was correct and accurate. Please see the attached excel spreadsheet with our of our current injection wells for the VGWU lease.

I've included everything I've found since 2005 and a few additional add pay I've found even earlier.

Let me know if there is anything else I can do to help out. Thanks!

Sean Heaster  
PE, Vacuum Tech Team

---

**From:** Goetze, Phillip, EMNRD [<mailto:Phillip.Goetze@state.nm.us>]  
**Sent:** Wednesday, March 05, 2014 10:24 AM

**To:** Heaster, Sean P  
**Cc:** Brown, Maxey G, EMNRD  
**Subject:** VGWU 77 Perfs

Sean and Maxey:

So pre 2006, VGWU #77 had perfs from 5911 ft to 6020 ft; then after the workover the perfs are from 5840 ft to 6020 ft. This puts a new light on the subject manner. The issuance for an exception to the 100-foot distance is no longer the compliance issue – it's a change in the perf interval in 2006. The upper packer at 5801 ft is within 100 ft of the current upper perf of 5840 ft. Now I need to find the paper trail for the addition of the perfs in 2006. If I can't, then will look at an administrative amendment to the order. Additions of perfs within the approved injection interval is considered a major modification, so it needs to be addressed.

Sean:

I need you to look through your wells in the VGWU to see if there are any additional changes in perf intervals – have there been any other wells in the 2006 workover cycle that new perfs are added? Please check. And call with any questions (afternoon). PRG

Maxey:

I am burning my morning in a meeting with another operator. I will give you a call and we can discuss what I see is a fix. Is there a time today (after 10) that I can reach you? Thanks. PRG

**Phillip R. Goetze, P.G.**

Engineering and Geological Services Bureau, Oil Conservation Division

1220 South St. Francis Drive, Santa Fe, NM 87505

O: 505.476.3466      F: 505.476.3462

[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

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**From:** Heaster, Sean P [<mailto:SHeaster@chevron.com>]

**Sent:** Wednesday, March 05, 2014 5:39 AM

**To:** Goetze, Phillip, EMNRD

**Cc:** Brown, Maxey G, EMNRD

**Subject:** RE: VGWU 65 (30-025-31705)

**Importance:** High

Phillip,

That is correct, we did do a workover in 2006 on VGWU 77 which added perforations from 5,840-5,927'. Please see the picture from wellview below.

Close Edit Data... Sync... Audit... Other Add-ins Help

Reports Schematic Wellhead Time Tracks Days vs Depth

Templates

Jobs

Zoom

P

- Global D&C Reports
- Global Base Business Reports
- Mid Con.
- Summary Reports
  - BHA Summary
  - Casing Summary
  - Cement Summary
  - Comp\_WO AFE vs Actual Time & C
  - Cost Summary - Graph
  - Daily Activity and Cost Summary
  - Days vs Depth and Cost - Graph
  - Drilling Summary 3
  - MCBU Phase Summary/Graph
  - Safety Board
- MCBU Reports
  - MCBU Drilling Report
  - MCBU Completion & WO Report
  - Daily Cost Summary - Legal
  - MCBU 'Outside' Drilling Report
  - MCBU 'Compl & WO' 'Outside' Report
  - EOW Drilling Report
  - EOW Completion Report
  - EOW Schematic
  - EOW AFE vs Field Estimate Costs
  - EOW Days & Cost Graph

Stim - Acid Non Energized 6/16/2006 00:00

New...

100%

1

PU SNIVEL BROKE CIRC, G/O FILL FROM 5873' TO 6160', (SOFT IRON SULFITE)  
 TOH W/ 182 JTS 2 7/8" WS & LD BIT.  
 PU 6 1/2" X 2 3/8" X 6.53' TS RBP, 5 1/2" X 2 3/8" X 6.29' HD PKR, 2 3/8" X 2 7/8" X 4'.  
 LOAD & TEST 5 1/2" CSG TO 6000' 15-MIN NO LOSS. RBP SET @ 5820'.  
 TOH W/ RBP & PKR.  
 TIH W/ 61 JTS 2 7/8" TBG W/ 2 7/8" WS & 2 7/8" NOTCH COLLAR 1956'.  
 SHUT DN PREP TO PLUG BACK W/ 31-100# SX 20/40 GRADY SAND 6160'.  
 Report Start Date: 6/21/2006

TRAVEL TIME, SAFETY MTG, REVIEW JSAs.  
 CONTINUE TIH W/ 2 7/8" WS TO 5163' W/ 161 JTS IN HOLE.  
 DUMP 32 SX 20/40 BRADY SAND.  
 SHUT IN HOLE TO ALLOW SAND TO FALL.  
 TAG SAND @ 6021'.  
 TOH W/ 2 7/8" TBG & NOTCH COLLAR.  
 MIRU SCHLUMBERGER WIRE LINE.  
 1ST RUN TIH W/ 3 1/8" GUNS 4 SPF W/ 120 DEGREES PHASING (TAG SAND @ 5873')  
 2ND RUN 3 1/8" GUNS 4 SPF 120 DEGREES PHASING 5873' TO (5877' 16 HOLES)  
 3RD RUN 3 1/8" GUNS 4 SPF 120 DEGREES PHASING (5840' TO 5844' 16 HOLES)  
 RIG DN SCHLUMBERGER.  
 SHUT DOWN DUE TO LIGHTING.  
 SHUT DN PREP TO RUN PFS & STIM.  
 Report Start Date: 6/22/2006

TRAVEL TIME, SAFETY MTG, REVIEW JSAs.  
 SAFETY MTG, MIRU SCHLUMBERGER WIRE LINE.

Sean Heaster  
PE, Vacuum Tech Team

**From:** Goetze, Phillip, EMNRD [mailto:[Phillip.Goetze@state.nm.us](mailto:Phillip.Goetze@state.nm.us)]  
**Sent:** Tuesday, March 04, 2014 6:17 PM  
**To:** Heaster, Sean P  
**Cc:** Brown, Maxey G, EMNRD  
**Subject:** RE: VGWU 65 (30-025-31705)

Sean:

Need some help on the #77. Your C-103 dated 06-29-2006 notes that last perfs shot at 5840-5844 and this is also shown on your well completion diagram. So – is this correct that your shallowest perf in the wells is 5840 ft and not 5,911 ft? If so, this may be a different issue – another type of letter to the well case file on clarification and some research on my part. Would appreciate the input. PRG

Phillip R. Goetze, P.G.  
 Engineering and Geological Services Bureau, Oil Conservation Division  
 1220 South St. Francis Drive, Santa Fe, NM 87505  
 O: 505.476.3466 F: 505.476.3462  
[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

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**From:** Heaster, Sean P [mailto:[SHeaster@chevron.com](mailto:SHeaster@chevron.com)]

**Sent:** Tuesday, March 04, 2014 3:08 PM

**To:** Goetze, Phillip, EMNRD

**Subject:** VGWU 65 (30-025-31705)

Hey Phillip,

We are currently rigged up on VGWU 65 for a recent MIT failure. They found a hole in the 181<sup>st</sup> joint of injection tubing. It appears we will have to set the packer above the 100' limit for this one as well. I talked to our well site manager this afternoon and it looks like he got the packer to hold 122' above the top perf. Can you please review this along with the VGWU 77 and make a recommendation. After we rig off the well, we will keep it shut in until further notice from the NMOCD. Thanks!

**Sean P. Heaster**, Production Engineer  
Vacuum Field Operations  
**Chevron N.A. Exploration and Production Co.**  
Mid-Continent Business Unit  
15 Smith Road, Midland, TX 79705  
Office (432) 687-7366 Cell (432) 640-9031

## **Goetze, Phillip, EMNRD**

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**From:** Heaster, Sean P <SHeaster@chevron.com>  
**Sent:** Thursday, February 13, 2014 11:13 AM  
**To:** Goetze, Phillip, EMNRD  
**Cc:** Ezeanyim, Richard, EMNRD; Brown, Paul T (PaulBrown); Moschetti, Nick (NMOS); Dehaan, Tanner  
**Subject:** VGWU 77 WIW Packer Placement Exception Request  
**Attachments:** VGWU 77\_WIW.xls; VGWU 77 Map.pdf  
**Importance:** High

Phillip,

I would like to request an exemption for setting a packer above the 100' allowable limit for a Vacuum Glorieta West Unit well. VGWU 77 (30-025-31872) we rigged up on for a workover to run a tandem packer system in the hole in November of 2013. In the process, we ended up setting the top packer approximately 110' above the top perforation (5,911'). There has been no injection in the well since we rigged off on 11/19/13 due to issues with the master valve. We will keep the well shut in until we receive further direction from the NMOCD.

I've included a WBD and map for additional information. Please let me know if there is anything else you need from us. I appreciate it.

Sean Heaster  
PE, Vacuum Tech Team

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**From:** Brown, Maxey G, EMNRD [<mailto:MaxeyG.Brown@state.nm.us>]  
**Sent:** Thursday, February 13, 2014 7:19 AM  
**To:** Heaster, Sean P  
**Subject:** RE: VGWU 77 WIW

Yes follow-up w/Mr. Goetze would be the best. MGB.

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**From:** Heaster, Sean P [<mailto:SHeaster@chevron.com>]  
**Sent:** Wednesday, February 12, 2014 5:42 PM  
**To:** Brown, Maxey G, EMNRD  
**Cc:** Brown, Paul T (PaulBrown); Moschetti, Nick (NMOS); Dehaan, Tanner; McCuen, Dane  
**Subject:** VGWU 77 WIW  
**Importance:** High

Maxey,

Sorry for the delayed response I got caught up with some other things and never got around to looking at my phone. VGWU 77 is under my area. The good news is currently the master valve on the wellhead is too small for us to pull the sleeve from the segregation valve in the injection string...thus we can't inject into the well even if we wanted to (for now)!

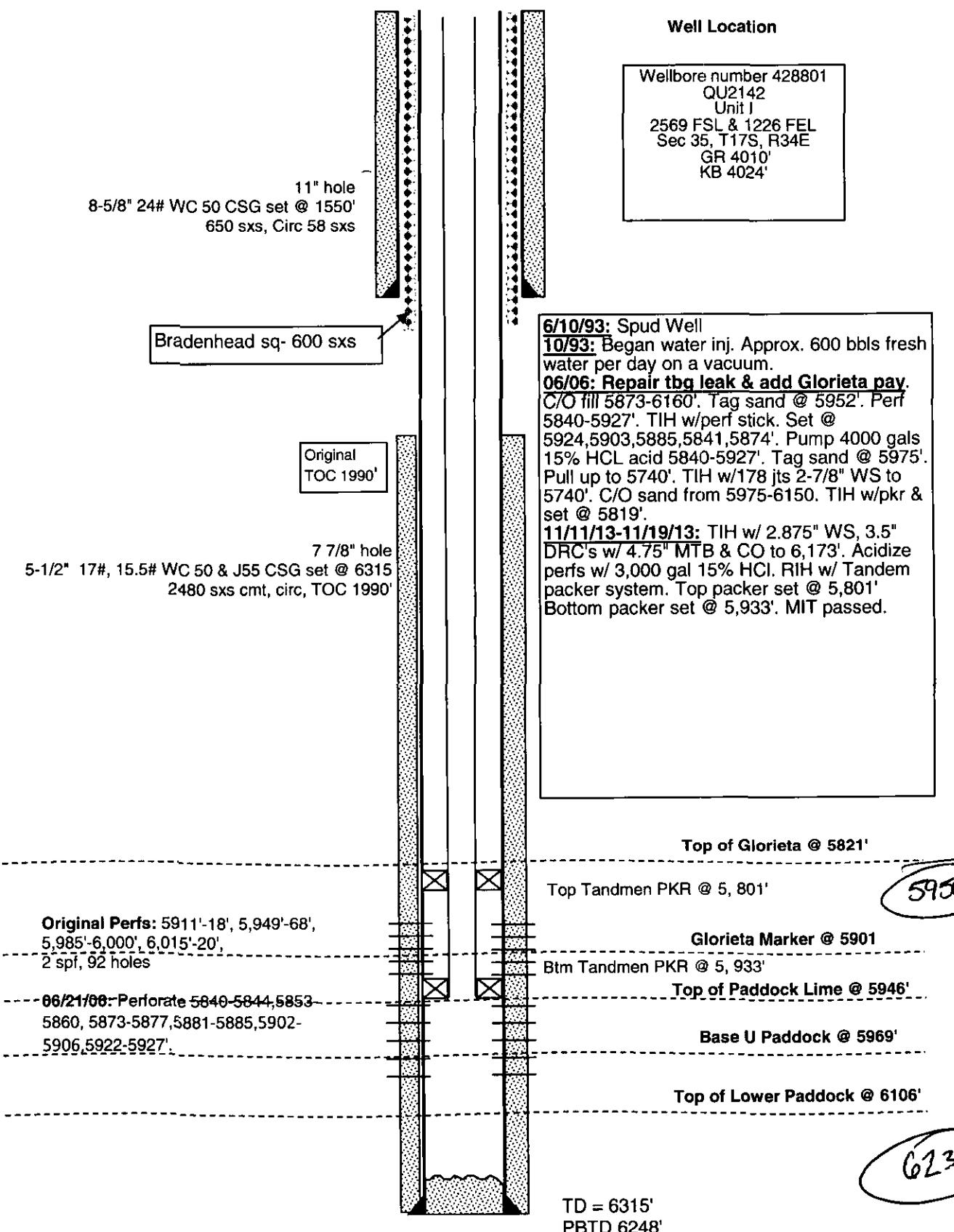
That being said, this well has an injection string designed to allow us to separate flow into both the Paddock and Glorieta formation. The design requires a tandem packer system with both a bottom and top packer. The top

packer is located at 5,801' just as you've noted, we also have a bottom packer set at 5,932'. We've run this type of set up in some of our CVU wells if I'm not mistaken, Paul can verify that for me.

I'm thinking at this point in might be easier to file for an exemption of the 100' limit for the top packer. Should I contact Phillip Goetze and work from there? I've attached a WBD for easy reference.

**Sean P. Heaster**, Production Engineer  
Vacuum Field Operations  
**Chevron N.A. Exploration and Production Co.**  
Mid-Continent Business Unit  
15 Smith Road, Midland, TX 79705  
Office (432) 687-7366 Cell (432) 640-9031

**VGWU 77 (WIW)**  
**API No. 3002531872**  
**Active Injection Well**



Well	API	Status	Added Perfs	Date Added	Perfs Outside of 5950 to 6230
4		A	None		
5	3002531834	A	5971-74, 5986-90, 5997-99, 6004-08, 6031-35	8/10/06	Within Inj Interval
9	3002531835	A	5928-29, 5933-37, 5941-45, 5955-57, 5970-73, 5988-92, 5996-6000	5/23/06	Above 5950
10		A	None		
11		A	None		
27	3002531869	A	5860-5954	7/17/03	Above 5950
28	3002531784	A	5860-5884, 5884-5908, 5908-5932, 5932-5957	10/27/03 - 11/6/2003	Above 5950
30		A	None		
38	3002531699	A	5820-96, 5910-15, 5920-26'	3/14/00	Above 5950
39	3002531700	A	5843-48, 5870-5916, 5932-38, 5942-56'	4/25/00	Above 5950
40	3002531701	TA	5880-90, 5904-54, 5960-74, 5908-28, 5928-40'	5/22/00 & 3/19/2007	Above 5950
41	3002531838	A	5830-62, 5900-5910, 5922-50, 5956-70, 5978-90'	6/5/00	Above 5950
42	3002531815	A	5932-50, 5972-92', 5953-60'	11/2/01 1/25/2007	Above 5950
50	3002531870	A	5850-85', 5895-5919'	10/13/03	Above 5950
51	3002531728	A	5852-5948'	5/12/04	Above 5950
52	3002531702	A	5894-5900, 5910-20, 5936-44, 5954-60, 5969-74'	10/2/13	Above 5950
53	3002531703	A	5908-16, 5925-34, 5942-48, 5956-62', 5970-78', 5989-93'	11/15/13	Above 5950
54	3002531816	A	5914-24, 5960-70, 5982-88, 5996-6000'	11/5/13	Above 5950
63		A	None		
64	3002531704	A	5816-5917'	7/1/04	Above 5950
65	3002531705	A	5850-52, 5857-66, 5876-83, 5888-91, 5899-5905, 5960-70, 5980-90, 5996-6000	6/12/06	Above 5950
66		A	None		
67		A	None		
68		A	None		
77	3002531872	A	5840-44, 5853-60, 5873-77, 5881-85, 5902-06, 5922-27	6/21/06	Above 5950
78H		TA	None		
79		A	None		
81		A	None		
82		A	None		
91		A	None		
92	3002531809	A	5986-6006, 6016-42, 6054-6068	4/16/01	Within Inj Interval
93H		A	None		
94		A	None		
95		A	None		
96		A	None		
104	3002531958	A	5890-5916, 6014-38, 6058-68, 6078-6102'	5/18/01	Above 5950
105		A	None		
106		A	None		
107	3002531884	✓A	5916-21, 5928-38, 5946-50, 5956-59, 5971-75, 5979-83'	10/1/06	Above 5950
108H		A	None		
120		Out-of-Unit	None		
121H		A	None		
122		A	None		
123		A	None		
124		A	None		

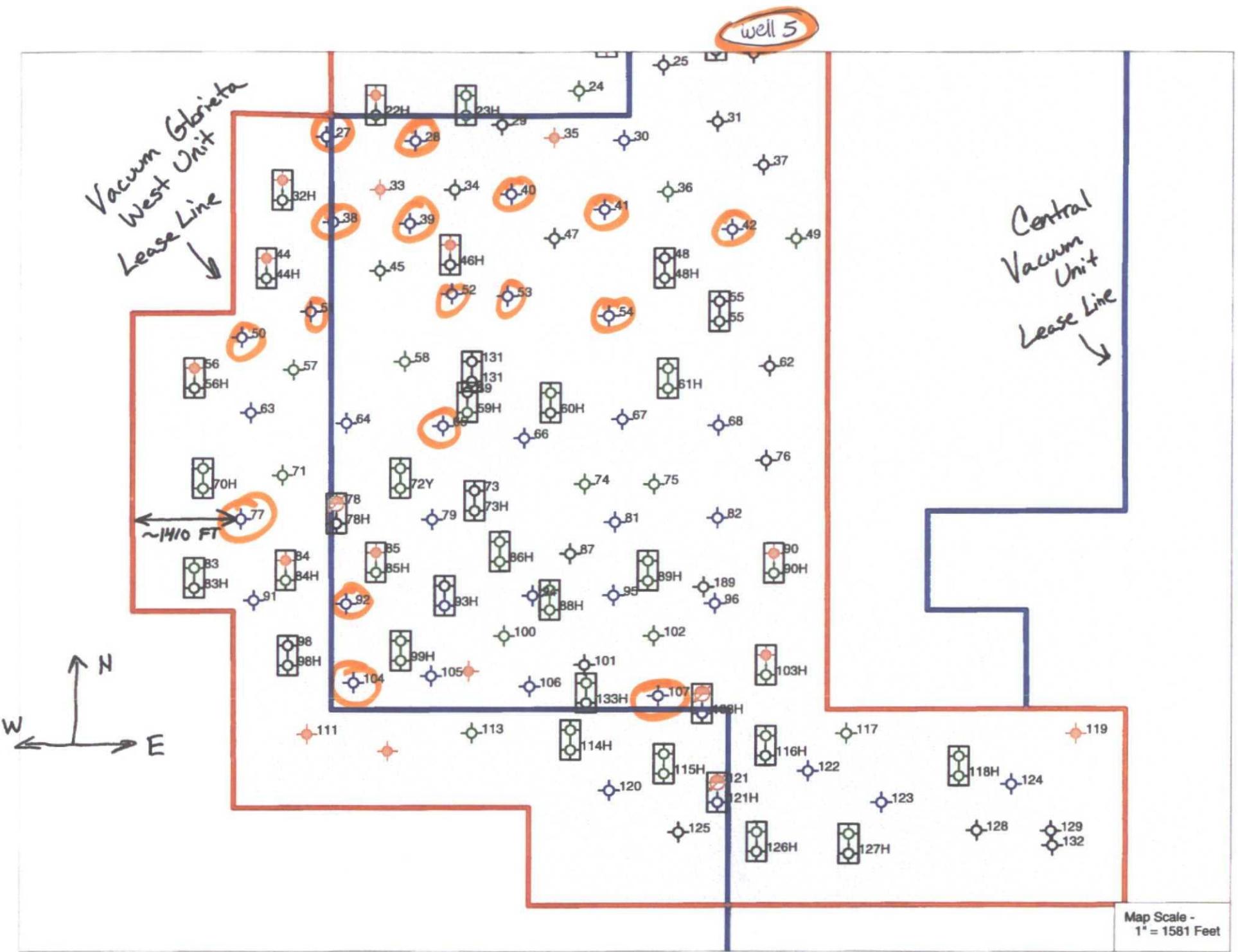
EXHIBIT "A"  
 DIVISION ORDER NO. R-9714  
 VACUUM GLORIETA WEST UNIT  
APPROVED NEWLY DRILLED INJECTION WELLS

<u>LEASE NAME</u>	<u>LOCATION</u>	<u>ULSTR</u>	<u>VOWU WELL NO.</u>
Bridges State	1360' FSL & 1300' FWL	M-24-17S-34E	4
Bridges State	1209' FSL & 2582' FWL	N-24-17S-34E	5
Bridges State	73' FNL & 1411' FWL	C-25-17S-34E	9
Yucca State	100' FSL & 2628' FWL	O-24-17S-34E	10
Bridges State	246' FNL & 1554' FEL	B-25-17S-34E	11
Bridges State	1328' FNL & 1399' FWL	F-25-17S-34E	17
Bridges State	1651' FNL & 2543' FWL	F-25-17S-34E	18
Bridges State	1502' FNL & 1520' FEL	G-25-17S-34E	19
NM T State NCT-1	1541' FNL & 181' FEL	H-25-17S-34E	20
NM N State	1330' FNL & 1283' FWL	E-30-17S-35E	21
Bridges State	1171' FSL & 34' FEL	I-26-17S-34E	27
McAllister State	2304' FSL & 1127' FWL	L-25-17S-34E	28
McAllister State	2522' FSL & 2283' FWL	K-25-17S-34E	29
NM Q State	2305' FSL & 1391' FEL	J-25-17S-34E	30
Swiggart	2520' FSL & 128' FEL	I-25-17S-34E	31
McAllister State	2387' FSL & 51' FEL	M-25-17S-34E	38
McAllister State	1194' FSL & 1055' FWL	M-25-17S-34E	39
McAllister State	1570' FSL & 2404' FWL	K-25-17S-34E	40
NM Q State	1437' FSL & 1646' FEL	J-25-17S-34E	41
NM N State	1250' FSL & 8 FWL	M-30-17S-35E	42
NM N State	1453' FSL & 1247' FWL	L-30-17S-35E	43
State H-35	112' FNL & 1214' FEL	A-35-17S-34E	50
State H-35	24' FNL & 31' FEL	A-35-17S-34E	51
McAllister State	65' FSL & 1587' FWL	N-25-17S-34E	52
McAllister State	65' FSL & 2350' FWL	N-25-17S-34E	53
NM Q State	7' FSL & 1693' FEL	O-25-17S-34E	54
NM N State	177' FSL & 52' FWL	M-30-17S-35E	55
State H-35	1370' FNL & 1135' FEL	A-35-17S-34E	63
NM O State NCT-1	1484' FNL & 204' FWL	E-36-17S-34E	64
NM O State NCT-1	1472' FNL & 1492' FWL	F-36-17S-34E	65

<u>LEASE NAME</u>	<u>LOCATION</u>	<u>ULSTR</u>	<u>VGWU WELL NO.</u>
NM O State NCT-1	1690' FNL & 2577' FWL	F-36-17S-34E	66
NM O State NCT-1	1435' FNL & 1408' FEL	G-36-17S-34E	67
NM O State NCT-1	1491' FNL & 280' FEL	H-36-17S-34E	68
Santa Fe Battery 2	1502' FNL & 1203' FWL	E-31-17S-35E	69
State H-35	2569' FSL & 1326' FEL	H-35-17S-34E	77
NM O State NCT-1	2491' FNL & 127' FWL	E-36-17S-34E	78
State VB	2461' FSL & 1351' FWL	K-36-17S-34E	79
NM O State NCT-1	2552' FNL & 2504' FEL	G-36-17S-34E	80
NM O State NCT-1	2466' FSL & 1505' FEL	J-36-17S-34E	81
NM O State NCT-1	2576' FSL & 82' FEL	I-36-17S-34E	82
M.E. Hale	1459' FSL & 1148' FEL	I-35-17S-34E	91
State I	1451' FSL & 149' FWL	L-36-17S-34E	92
State VB	1723' FSL & 1575' FWL	K-36-17S-35E	93
NM O State NCT-1	1525' FSL & 2591' FEL	J-36-17S-34E	94
NM O State NCT-1	1519' FSL & 1548' FEL	J-36-17S-34E	95
NM O State NCT-1	142' FSL & 214' FEL	I-36-17S-34E	96
Santa Fe Battery 2	1419' FSL & 1225' FWL	L-31-17S-35E	97
NM O State NCT-1	361' FSL & 300' FWL	M-36-17S-34E	104
NM O State NCT-1	403' FSL & 1340' FWL	N-36-17S-34E	105
NM O State NCT-1	310' FSL & 2542' FEL	O-36-17S-34E	106
NM O State NCT-1	184' FSL & 1382' FEL	O-36-17S-34E	107
NM O State NCT-1	213' FSL & 301' FEL	P-36-17S-34E	108
Warn State AC 2	96' FNL & 2498' FWL	C-6-18S-35E	109
NM R State NCT-1	74' FNL & 56' FEL	A-6-18S-35E	110
NM L State	1102' FNL & 1575' FEL	B-1-18S-34E	120
NM L State	1014' FNL & 140' FEL	A-1-18S-34E	121
Warn State AC 2	1000' FNL & 1136' FWL	D-6-18S-35E	122
Warn State AC 2	1080' FNL & 2344' FWL	C-6-18S-35E	123
NM R State NCT-1	1020' FNL & 1419' FEL	B-6-18S-35E	124

EXISTING WELL TO BE CONVERTED TO INJECTION

Bridges State No. 113 1980' FNL & 830' FWL E-24-17S-34E 1



Well	API	Status	Added Perfs	Date Added	On NMOCD Web?	Well	API	Status	Added Perfs	Date Added	On NMOCD Web?
38	3002531699	A	5820-96, 5910-15, 5920-26'	3/14/00	Yes	4		A	None		
39	3002531700	A	5843-48, 5870-5916, 5932-38, 5942-56'	4/25/00	Yes	5	3002531834	A	5971-74, 5986-90, 5997-99, 6004-08, 6031-35	8/10/06	Yes
40	3002531701	TA	5880-90, 5904-54, 5960-74, 5908- 28, 5928-40'	5/22/00	Yes	9	3002531835	A	5928-29, 5933-37, 5941-45, 5955-57, 5970-73, 5988-92, 5996-6000	5/23/06	Yes
41	3002531838	A	5830-62, 5900-5910, 5922-50, 5956-70, 5978-90'	6/5/00	Yes	10		A	None		
42	3002531815	A	5932-50, 5972-92', 5953-60'	11/2/01	Yes	11		A	None		
50	3002531870	A	5850-85', 5895-5919'	10/13/03	Yes	27	3002531869	A	5860-5954	7/17/03	Yes
51	3002531728	A	5852-5948'	5/12/04	Yes	28	3002531784	A	5860-5884, 5884-5908, 5908- 5932, 5932-5957	10/27/03 - 11/6/2003	Yes
52	3002531702	A	5894-5900, 5910-20, 5936-44, 5954-60, 5969-74'	10/2/13	Yes	30		A	None		
53	3002531703	A	5908-16, 5925-34, 5942-48, 5956- 62', 5970-78', 5989-93'	11/15/13	Yes	31		TA	None		
54	3002531816	A	5914-24, 5960-70, 5982-88, 5996- 6000'	11/5/13	Yes	Well	API	Status	Added Perfs	Date Added	On NMOCD Web?
63		A	None			91		A	None		
64	3002531704	A	5816-5917'	7/1/04	Yes	92	3002531809	A	5986-6006, 6016-42, 6054- 6068,	4/16/01	Yes
65	3002531705	A	5850-52, 5857-66, 5876-83, 5888- 91, 5899-5905, 5960-70, 5980- 90, 5996-6000'	6/12/06	Yes	93H		A	None		
66		A	None			94		A	None		
67		A	None			95		A	None		
68		A	None			96		A	None		
77	3002531872	A	5840-44, 5853-60, 5873-77, 5881- 85, 5902-06, 5922-27	6/21/06	Yes	104	3002531858	A	5890-5916, 6014-38, 6058-68, 6078-6102'	5/18/01	Yes
78H		TA	None			105		A	None		
79		A	None			106		A	None		
81		A	None			107	3002531884	A	5916-21, 5928-38, 5946-50, 5956-59, 5971-75, 5979-83'	10/1/06	Yes
82		A	None			108H		A	None		
						120			Out-of-Unit	None	
						121H		A	None		
						Well	API	Status	Added Perfs	Date Added	On NMOCD Web?
						122		A	None		
						123		A	None		
						124		A	None		

VGWU Injection Satellite #1
VGWU Injection Satellite #2
VGWU Injection Satellite #3
VGWU Injection Satellite #4