

30-025-31709

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO
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ABOVE THIS LINE FOR DIVISION USE ONLY

HOBBS OED

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505



SEP 28 2011

RECEIVED

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

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 _____**

[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
Print or Type Name

Carolyn Haynie
Signature

NM Petro Engineering Technical Assistant
Title

9-6-11
Date

chay@chevron.com
e-mail Address

OCT 20 2011



HOBBS OCD

SEP 28 2011

RECEIVED

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

September 6, 2011

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
Central Vacuum Unit
Lea, County, New Mexico

Chevron North America , respectfully requests administrative approval to convert the Vacuum Glorieta West Unit # 80, (API # 30-025-31709), to Central Vacuum Unit # 271 Water Injection well in the Grayburg San Andres formation. The CVU # 271 is located: 2571' FNL & 2442' FEL, Unit Letter, G, Section 36; T17S, R34E, Lea County, New Mexico.

Chevron plans to inject water, CO2, and produced gas into the Grayburg San Andres formations perforated area: 4354' - 4616', 96 total holes.

Attached are the OCD C-108 and the information relative to an injection well. A copy of the legal notice has been submitted to the Hobbs News-Sun and the affidavit will be submitted to your office upon our receipt.

If additional information is required, you may contact me at 432-687-7261 or email me at chay@chevron.com or contact the project engineer, Edgar Acero, at 432-687-7343, EDGAR.ACERO@chevron.com.

Sincerely,

Carolyn Haynie
NM PE Technical Assistant

Enclosure

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

SEP 28 2011

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT **RECEIVED**

- I. PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: CHEVRON U.S.A. INC. (OGRID - 4323)
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: Order # R-5530-E
- 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. 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.). ATTACHED
- *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. ATTACHED
- IX. Describe the proposed stimulation program, if any. ATTACHED
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). PREVIOUSLY SUBMITTED
- 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. PREVIOUSLY SUBMITTED
- 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. ATTACHED
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. ATTACHED
- 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: NM PETRO ENGINEERING TECH ASSISTANT
SIGNATURE: Carolyn Haynie DATE: 9-6-11
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.

ATTACHED

- 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. ATTACHED

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. ATTACHED

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.

INJECTION WELL DATA SHEET

OPERATOR: CHEVRON U.S.A. INC.WELL NAME & NUMBER: CENTRAL VACUUM UNIT # 271

WELL LOCATION: 2517' FNL & 2442' FEL UNIT G: SEC. 36. T17S. R34E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 11" Casing Size: 8-5/8"
Cemented with: 650 sx. or _____ ft³
Top of Cement: Surface Method Determined: Circulation

Intermediate Casing

Hole Size: _____ Casing Size: _____
Cemented with: _____ sx. or _____ ft³
Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 7-7/8" Casing Size: 5-1/2
Cemented with: 1530 sx. or _____ ft³
Top of Cement: Surface Method Determined: Circulation
Total Depth: 6275'

Injection Interval

4354' feet to 4616'

(New Perforations)

INJECTION WELL DATA SHEETTubing Size: 2-3/8" Lining Material: FiberglassType of Packer: 5-1/2" Nickel plated Internally plastic coated Inj Pkr w/1.50" ID 'F' Stainless SteelPacker Setting Depth: @ +/-4300'

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:
- Grayburg San Andres

3. Name of Field or Pool (if applicable):
- Central Vacuum Unit

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.
- Yes, previously completed in the Glorieta Pool in the Vacuum Glorieta Field, as the VGWU #80 wellbore, with gross perms from 5930 to 6159'. TA'd w/ CIBP @ 5730', top w/35' cmt. TOC +/- 5695'.

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

Glorieta (5850-6200'), Drinkard (6400-7200'), Abo (8400-9200') Wolfcamp (9200-10,000')

ATTACHMENT TO FORM C-108

RE: Central Vacuum Unit # 271

- PART I Chevron Corporation plans to recomplete the Vacuum Glorieta West Unit # 80 to the Central Vacuum Unit # 271 as an injection well in the Vacuum Grayburg San Andres formation.
- PART II Chevron U.S.A. INC.
15 Smith Road
Midland, TX 79705
- PART III Well Data Sheets attached
- PART IV This is an expansion of an existing project. Order #R-5530-E
- PART V Map attached designating ½ mile and 2 mile radius of review area.
- PART VI Well tabulation and P&A Schematics are attached.
- PART VII 1) Anticipated injection rates could be as high as 3,000 barrels of water per day, or 10 million cubic feet of CO2 per day.

2) This will be a closed system.

3) Water, produced gas & CO2 will be injected into the Grayburg San Andres pool of the Vacuum field. Water injection in the CVU 271 will be at the expected maximum rate of 3,000 barrels of water per day and an expected maximum surface pressure of 1500 psi. CO2 and produced gas injection will be at an expected maximum rate of 10 MMCF per day and an expected maximum surface pressure of 1850 psi.

4,5) This data has been previously submitted under NMOCD Order #R-5530-E.
- PART VIII This data has been submitted under NMOCD Order No. #R-5530-E.
- PART IX This stimulation program will be ~8,000 gallons 15% HCL acid with rock salt as a diverter.
- PART X Logs will be submitted as soon as possible after the well is recompleted.
- PART XI This data has been previously submitted NMOCD Order No. #R-5530.
- PART 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.
- PART XIII Copies of the OCD Form C108, the Well Data Sheet and map have been sent to the offset operators and surface owner as per the listing below.

XTO ENERGY INC.
ATTN: Mr. Steven Cobb
810 Houston Street, Ste 2000
Ft. Worth, Texas, 76102

MOBIL PRODUCING TX & NM INC.
ATTN: Land Department
P.O. BOX 4707
Houston. TX 77210-4707

MARATHON OIL COMPANY
ATTN: Mr. Robert Angel
P.O. BOX 3487
Houston, TX 77253-3487

APACHE PERMIAN EXPLORATION & PRODUCTION LLC
2000 Post Oak Blvd, Ste 100
Houston, TX 77056

McGOWAN WORKING PARTNERS INC.
1837 Crane Ridge Drive
Jackson, MS 39216

QUANTUM RESOURCES MANAGEMENT LLC
1401 McKinney Street, Ste. 2400
Houston, TX 77010

CONOCOPHILLIPS PETRO CO.
ATTN: Land Department
P.O. BOX 2197
Houston, TX 77210-4707

Surface Own
PIERCE TRUST
1717 Jackson
Pecos, TX 79772

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

A copy of the Legal Notice as published in the Hobbs News Sun is attached to this filing.
Certified copy will be forwarded as soon as it is received in this office.

Wells within 1/2 mile radius of VWGU # 80 to be Converted to CVU # 271

	API #	Name	Location	Unit Letter	S	T	R	Co	Type	Status	ELEV	TD	COMP	SPUD	COMMENTS
1	30-025-25708	CVU WI-81	1332' FSL & 1310' FWL	L	36	17S	34E	LEA	INJ	ACTIVE	3998	4880	4/5/1979	3/3/1979	
2	30-025-29765	CVU 169	760' FSL & 1980' FWL	N	36	17S	34E	LEA	OIL	PS	3993	4710	12/10/1986	11/8/1986	
3	30-025-33331	CVU 176	1988' FSL & 355' FEL	I	36	17S	34E	LEA	OIL	FL	3985	4840	5/29/1996	5/10/1996	
4	30-025-33712	CVU 177	1955' FSL & 1335' FEL	J	36	17S	34E	LEA	OIL	FL	3994	4850	1/11/1997	12/19/1996	
5	30-025-33332	CVU 178	1993' FSL & 2585' FWL	K	36	17S	34E	LEA	OIL	FL	3996	4850	5/9/1996	4/13/1996	
6	30-025-33333	CVU 179	1997' FSL & 1263' FWL	L	36	17S	34E	LEA	OIL	PR	3999	4850	4/26/1996	4/3/1996	
7	30-025-33334	CVU 189	751' FSL & 1246' FEL	P	36	17S	34E	LEA	OIL	PR	3988	4850	5/28/1996	4/23/1996	
8	30-025-31197	CVU 290	670' FSL & 2630' FWL	N	36	17S	34E	LEA	OIL	PS	3994	4850	7/29/1991	5/29/1991	
9	30-025-31195	CVU 291	660' FSL & 1330' FWL	N	36	17S	34E	LEA	OIL	FL	3999	4850	7/30/1991	6/19/1991	
10	30-025-02233	CVU 53	660' FNL & 1980' FWL	C	36	17S	34E	LEA	OIL	PS	4001'	4700	1/7/1939	12/1/1938	
11	30-025-02232	CVU 54	660' FNL & 660' FWL	D	36	17S	34E	LEA	OIL	PS	4018'- DF	4705	9/12/1938	8/1/1938	
12	30-025-02239	CVU 68	1980' FNL & 1980' FWL	F	36	17S	34E	LEA	OIL	FL	4012'- DF	4725	8/2/1938	7/3/1938	
13	30-025-02238	CVU 77	1980' FSL & 660' FEL	I	36	17S	34E	LEA	OIL	PS	3997'- DF	4710	8/3/1938	7/3/1938	
14	30-025-02240	CVU 78	1980' FSL & 1980' FEL	J	36	17S	34E	LEA	OIL	PR	4002'	4725	8/9/1938	7/5/1938	
15	30-025-02229	CVU 79	2140' FSL & 1840' FWL	K	36	17S	34E	LEA	OIL	PR	4003'- KB	4690	4/22/1938	3/14/1938	
16	30-025-02234	CVU 80	1980' FSL & 660' FWL	L	36	17S	34E	LEA	OIL	PS	4001'- DF	4626	2/27/1938	1/22/1938	
17	30-025-02244	CVU 90	660' FSL & 1980' FEL	O	36	17S	34E	LEA	OIL	PS	3991'- DF	4710	10/15/1939	9/6/1939	

18	30-025-35213	CVU WI-241H	74' FNL & 1940' FEL	B	36	17S	34E	LEA	INJ	ACTIVE	3997	5988	3/27/2001	1/13/2001
19	30-025-38637	CVU WI-455	1310' FNL & 660' FWL	D	36	17S	34E	LEA	INJ	ACTIVE	4008	5320	11/22/2008	5/13/2008
20	30-025-38638	CVU WI-456	1360' FNL & 1980' FWL	F	36	17S	34E	LEA	INJ	ACTIVE	4003	5010	11/8/2008	6/19/2008
21	30-025-38639	CVU WI-457	1593' FNL & 1912' FEL	G	36	17S	34E	LEA	INJ	ACTIVE	3998	5026	1/21/2009	10/30/2008
22	30-025-38640	CVU WI-458	1153' FNL & 848' FEL	A	36	17S	34E	LEA	INJ	ACTIVE	3993	5035	3/12/2009	11/17/2008
23	30-025-25722	CVU WI-56	1310' FNL & 2630' FWL	C	36	17S	34E	LEA	INJ	ACTIVE	4800	4800	2/6/1978	12/21/1977
24	30-025-25723	CVU WI-57	1310' FNL & 1330' FEL	B	36	17S	34E	LEA	INJ	ACTIVE	3993	4800	2/15/1978	1/9/1978
25	30-025-25724	CVU WI-58	1310' FNL & 132' FEL	A	36	17S	34E	LEA	INJ	ACTIVE	3999	4800	2/14/1978	1/17/1978
26	30-025-25727	CVU WI-71	2630' FNL & 2623' FEL	G	36	17S	34E	LEA	INJ	ACTIVE	4003	4800	2/22/1978	1/31/1978
27	30-025-25728	CVU WI-73	2630' FNL & 142' FWL	H	36	17S	34E	LEA	INJ	ACTIVE	3985	4800	2/21/1978	1/29/1978
28	30-025-25730	CVU WI-82	1333' FSL & 2528' FWL	K	36	17S	34E	LEA	INJ	ACTIVE	3994	4800	3/2/1979	1/29/1979
29	30-025-25731	CVU WI-83	1330' FSL & 1330' FEL	J	36	17S	34E	LEA	INJ	ACTIVE	3988	4800	6/5/1978	5/6/1978
30	30-025-32339	NEW MEXICO 'O' STAT 36	330' FSL & 2210' FWL	N	36	17S	34E	LEA	OIL	TA	3995	8100	3/20/1994	2/9/1994
31	30-025-33148	NEW MEXICO 'O' STAT 38	2085' FSL & 710' FEL	I	36	17S	34E	LEA	OIL	TA	3987	11500	1/11/1996	11/4/1995
32	30-025-33569	NEW MEXICO 'O' STAT 39	2075' FNL & 2110' FEL	G	36	17S	34E	LEA	OIL	PR	3997	10300	6/16/1997	12/31/1996
33	30-025-38140	NM O STATE NCT-1 40	1885' FSL & 1978' FEL	J	36	17S	34E	LEA	SWDW	ACTIVE	3394	13300	5/7/2007	1/19/2007
34	30-025-33570	STATE 'BA' 14	990' FNL & 330' FEL	A	36	17S	34E	LEA	OIL	FL	3991	11500	12/31/1996	9/10/1996
35	30-025-30126	VGWU 102	990' FSL & 990' FEL	P	36	17S	34E	LEA	OIL	PS	3998	6290	12/21/1987	11/6/1987
36	30-025-32338	VGWU 133	355' FSL & 1875' FEL	O	36	17S	34E	LEA	OIL	PS	3991	8100	3/28/1994	2/28/1994

37	30-025-30715	VGWU 58	660' FNL & 989 FWL	D	36	17S	34E	LEA	OIL	PS	4006	6600	1/17/1990	11/20/1989	
38	30-025-21637	VGWU 87	2090' FSL & 2086' FEL	J	36	17S	34E	LEA	OIL	PR	4002-KB	10200	1/23/1966	11/19/1965	
39	30-025-31844	VGWU 96	1427' FSL & 183' FEL	I	36	17S	34E	LEA	INJ	ACTIVE	3986	6343	3/18/1993	2/26/1993	
40	30-025-31874	VGWU WI-106	310' FSL & 2630' FEL	O	36	17S	34E	LEA	INJ	ACTIVE	3992	6280	6/5/1993	5/5/1993	
41	30-025-31816	VGWU WI-54	51' FNL & 1588' FEL	B	36	17S	34E	LEA	INJ	ACTIVE	3996	6338	2/19/1993	1/24/1993	
42	30-025-31705	VGWU WI-65	1522' FNL & 1492' FWL	F	36	17S	34E	LEA	INJ	ACTIVE	4004	6270	10/26/1992	10/6/1992	
43	30-025-31706	VGWU WI-66	1690' FNL & 2577' FWL	F	36	17S	34E	LEA	INJ	ACTIVE	3993	6290	10/13/1992	9/24/1992	
44	30-025-31808	VGWU WI-67	1435' FNL & 1408' FEL	G	36	17S	34E	LEA	INJ	ACTIVE	3993	6332	2/20/1993	2/3/1993	
45	30-025-31839	VGWU WI-68	1728' FNL & 351' FEL	H	36	17S	34E	LEA	INJ	ACTIVE	3989	6338	3/10/1993	2/14/1993	
46	30-025-31708	VGWU WI-79	2561' FSL & 1351' FWL	K	36	17S	34E	LEA	INJ	ACTIVE	4004	6255	11/23/1992	11/7/1992	
47	30-025-31709	VGWU WI-80	2514 FNL & 2442' FEL	G	36	17S	34E	LEA	INJ	TA	3997	6275	12/6/1992	11/18/1992	
48	30-025-31842	VGWU WI-81	2521' FSL & 1503' FEL	J	36	17S	34E	LEA	INJ	ACTIVE	3991	6304	2/25/1993	2/6/1993	
49	30-025-31840	VGWU WI-82	2576' FSL & 149' FEL	I	36	17S	34E	LEA	INJ	ACTIVE	3986	6334	3/26/1993	3/10/1993	
50	30-025-31843	VGWU WI-95	1534' FSL & 1521' FEL	J	36	17S	34E	LEA	INJ	ACTIVE	3990	6283	3/11/1993	2/15/1993	
51	30-025-30476	VGWU # 100	990' FSL & 2310' FWL	N	36	17S	34E	LEA	OIL	PS	3984	6270	5/4/1989	3/30/1989	NEW MEXICO 'O' STAT 29
52	30-025-32450	VGWU # 189	1650' FSL & 330' FEL	I	36	17S	34E	LEA	OIL	PR	3986	8148	5/3/1994	3/31/1994	NEW MEXICO 'O' STAT 37
53	30-025-21432	VGWU # 61H	660' FNL 7760' FEL	A	36	17S	34E	LEA	OIL	PS	3991	6830	7/3/1965	4/28/1965	STATE 'BA' 10
54	30-025-30714	VGWU # 73	2310' FNL 7 1980' FWL	F	36	17S	34E	LEA	OIL	PR	4002	6260	2/17/1990	1/29/1990	NEW MEXICO 'O' STAT 31
55	30-025-30968	VGWU # 74	2310' FNL & 1900' FEL	G	36	17S	34E	LEA	OIL	PS	4001	6300	2/15/1991	11/29/1990	NEW MEXICO 'O' STAT 32

56	30-025-30969	VGWU # 75	2310' FNL & 990' FEL	H	36	17S	34E	LEA	OIL	TA	3995	6300	3/16/1991	12/14/1990	NEW MEXICO 'O' STAT 33
57	30-025-33711	CVU 167H	2000' FNL & 2630' FEL	G	36	17S	34E	LEA	OIL	FL	3996	4850	1/21/1997	12/26/1996	Horizontal
58	30-025-33335	CVU 168H	2068' FNL & 1467' FWL	F	36	17S	34E	LEA	OIL	PS	3985	4850	5/23/1996	5/1/1996	Horizontal
59	30-025-35212	CVU 173H	2509' FNL & 660' FEL	H	36	17S	34E	LEA	INJ	ACTIVE	3988	5913	1/17/2001	11/22/2000	Horizontal
60	30-025-35213	CVU 241H	74 FNL & 1940' FEL	B	36	17S	34E	LEA	INJ	ACTIVE	3997	5664	3/27/2001	2/11/2001	Horizontal
61	30-025-30103	CVU 253H	675' FNL & 1330' FWL	C	36	17S	34E	LEA	OIL	SI	4006	4720	3/13/1988	2/14/1988	Horizontal
62	30-025-30022	CVU 266H	1970' FNL 7 1310' FEL	H	36	17S	34E	LEA	OIL	PS	3993	4710	9/28/1987	8/31/1987	Horizontal
63	30-025-02230	CVU 51H	660' FNL & 660' FEL	A	36	17S	34E	LEA	OIL	PS	3991	6606	12/20/2005	11/1/2005	Horizontal
64	30-025-34945	STATE 'BA' 15H	612' FNL & 2135' FWL	C	36	17S	34E	LEA	OIL	PR	4000	10500	7/16/2000	4/21/2000	Horizontal
65	30-025-31817	VGWU 55H	146' FSL & 128' FEL	P	25	17S	34E	LEA	OIL	PR	3990	9861	9/3/2006	7/18/2006	Horizontal
66	30-025-30971	VGWU 59H	990' FNL & 1880' FWL	C	36	17S	34E	LEA	OIL	PS	4003	6270	4/9/1991	10/25/1990	Horizontal
67	30-025-30716	VGWU 60H	990' FNL & 2308' FEL	B	36	17S	34E	LEA	OIL	PR	3999	6627	1/15/1990	12/10/1989	Horizontal
68	30-025-30779	VGWU 72H	2008' FNL & 990' FWL	E	36	17S	34E	LEA	OIL	PS	4005	6250	2/17/1990	1/9/1990	Horizontal
69	30-025-20781	VGWU 83H	1980' FSL & 1785' FEL	J	35	17S	34E	LEA	OIL	PR	4013	8073	5/2/2004	3/15/2004	Horizontal
70	30-025-20236	VGW 85H	2180' FSL & 660' FWL	L	36	17S	34E	LEA	OIL	PS	3993	7062	6/9/2001	4/23/2001	Horizontal
71	30-025-20179	VGWU 86H	2310' FSL & 2310' FWL	K	36	17S	34E	LEA	OIL	PS	4009- DF	6850	7/19/1963	6/4/1963	Horizontal
72	30-025-30206	VGWU 88H	1653' FSL & 2309' FEL	J	36	17S	34E	LEA	OIL	PS	3994	6275	3/25/1988	2/14/1988	Horizontal
73	30-025-33429	VGWU 89H	2000' FSL & 1070' FEL	I	36	17S	34E	LEA	OIL	PS	3988	6300	6/24/1996	6/5/1996	Horizontal
74	30-025-31707	VGWU WI-78H	2491' FNL & 127' FWL	E	36	17S	34E	LEA	INJ	TA	4005	6250	11/14/1992	10/27/1992	Horizontal

75	30-025-31810	VGWU WI-93H	1723' FSL & 1575' FEL	K	36	17S	34E	LEA	INJ	ACTIVE	3998	6268	2/8/1993	1/16/1993	Horizontal
76	30-025-31841	VWGU WI-94	1525' FSL & 2591' FEL	J	36	17S	34E	LEA	INJ	ACTIVE	3994	6280	2/17/1993	1/27/1993	
77	30-025-31132	VGWU 114H	280 FNL & 2080' FEL	B	1	18S	34E	LEA	OIL	PS	3993	7471	2/24/1998	11/15/1997	Horizontal
78	30-025-25704	CVU WI-41	60' FNL & 2552' FWL	C	36	17S	34E	LEA	INJ	P&A	4001	4800	2/4/1978	12/12/1977	WBD Included
79	30-025-02236	CVU 66	1980' FNL & 660' FEL	H	36	17S	34E	LEA	OIL	P&A	4009'- DF	4750	5/19/1938	4/12/1938	WBD Included
80	30-025-02235	CVU 69	1980' FNL & 660' FWL	E	36	17S	34E	LEA	OIL	P&A	4015'- DF	4720	4/18/1938	3/17/1938	WBD Included
81	30-025-25697	CVU 72	2630' FNL & 1330' FEL	G	36	17S	34E	LEA	INJ	P&A	3991	4812	1/25/1978	11/10/1977	WBD Included
82	30-025-02243	CVU 91	660' FSL & 198' FWL	N	36	17S	34E	LEA	OIL	P&A	4006'- DF	4710	11/4/1938	10/3/1938	WBD Included
83	30-025-30713	NEW MEXICO 'O' STAT 30	1980' FNL 7 990' FWL	E	36	17S	34E	LEA	DRY	P&A	4005	1460	1/9/1990	12/30/1989	
84	30-025-20872	STATE CC UNIT 1	1980' FSL 7 860' FWL	L	36	17S	34E	LEA	OIL	P&A	4003- KB	12080	8/12/1964	4/26/1964	
85	30-025-20197	STATE N MEX O NCT-1 21	1900' FNL & 1900' FEL	G	36	17S	34E	LEA	OIL	P&A	4007- DF	6850	10/26/1963	9/27/1963	
86	30-025-20418	STATE OF N ME NCT-1 12	1800' FSL & 1800' FEL	J	36	17S	34E	LEA	OIL	P&A	3991	6920	7/5/1963	12/14/1962	
87	30-025-20008	STATE OF N ME NCT-1 14	1874' FSL & 2086' FEL	J	36	17S	34E	LEA	OIL	P&A	3992	12154	7/26/1963	2/11/1963	
88	30-025-20125	STATE OF N ME NCT-1 17	760' FSL & 2080' FWL	N	36	17S	34E	LEA	OIL	P&A	3997	12082	6/22/1963	3/14/1963	
89	30-025-20274	STATE OF N ME NCT-1 18	1880' FNL & 560' FEL	H	36	17S	34E	LEA	OIL	P&A	3989	11510	10/9/1963	5/9/1963	
90	30-025-20203	STATE OF N ME NCT-1 19	1980' FNL & 2179' FWL	F	36	17S	34E	LEA	OIL	P&A	4002	6850	10/19/1963	8/16/1963	
91	30-025-20111	STATE OF N ME NCT-1 20	1980' FWL & 467' FWL	E	36	17S	34E	LEA	OIL	P&A	4016- DF	6825	9/11/1963	7/11/1963	
92	30-025-02228	STATE VB 1	1980' FSL & 1980' FWL	K	36	17S	34E	LEA	DRY	P&A		2034	3/12/1938	2/26/1938	
93	30-025-20237	VGWU 101	600' FSL & 1900' FEL	O	36	17S	34E	LEA	OIL	P&A	3990	6800	12/21/1963	10/31/1963	

94	30-025-20046	VGWU # 130	519' FSL & 1839' FWL	N	36	17S	34E	LEA	OIL	P&A	3997	6853	2/18/1963	1/16/1963	WBD Included
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**CURRENT
WELLBORE DIAGRAM**

CVU 41

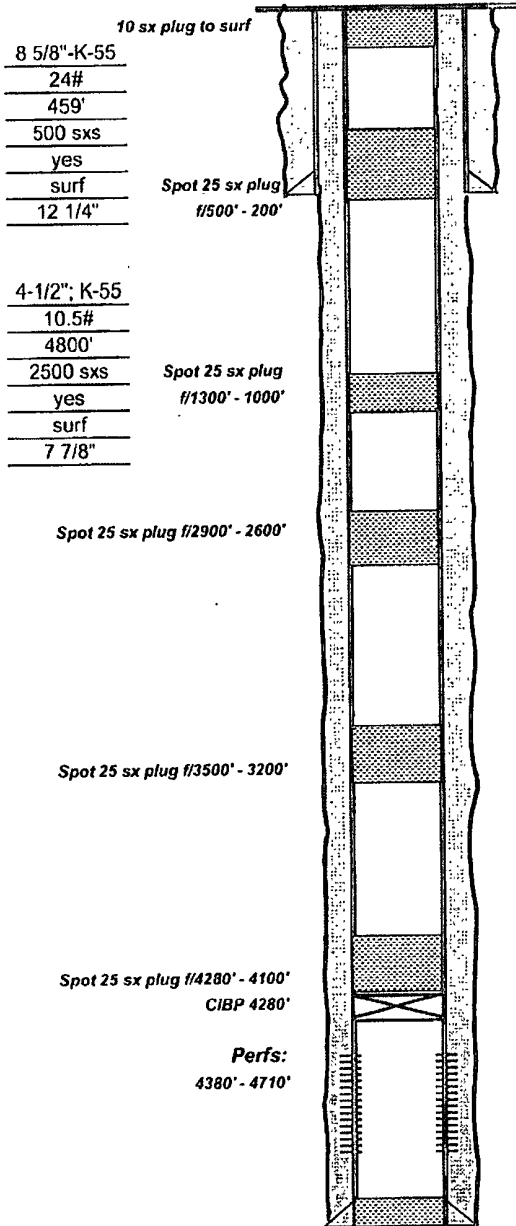
Created:	11/19/2007	By:	NC	Field:	Vacuum Grayburg San Andres
Updated:	8/30/2011	By:	CHAY	Sec:	36
Lease:	Central Vacuum Unit	Well No.:	41	TSHP/Range:	17S 34E
Surface Location:	60 FNL 2552 FWL	Unit Ltr:	C	Sec:	
Bottomhole Location:		Unit Ltr:		API:	30-025-25704
County:	Lea	St:	NM	Cost Center:	
Current Status:	P&A'd 5/7/2001	St Lease:	B-1565	CHVNO:	EP8744
Directions to Wellsite:		Elevation:	4001 GR	TEPI:	
				MVP:	

Surface Csg.

Size: 8 5/8"-K-55
 Wt.: 24#
 Set @: 459'
 Sxs cmt: 500 sxs
 Circ: yes
 TOC: surf
 Hole Size: 12 1/4"

Production Csg.

Size: 4-1/2"; K-55
 Wt.: 10.5#
 Set @: 4800'
 Sxs Cmt: 2500 sxs
 Circ: yes
 TOC: surf
 Hole Size: 7 7/8"



KB: 4013

DF:

GL: 4001

Original Spud Date: 12/12/1977

Original Compl. Date: 2/4/1978

Well History

Initial Completion: Perfs: 4380' - 4710'. Trt w/3100 gals 15% NE, 140# rock Salt & 60# Benzoic flks. Drid as a Wtr Inj. well, began Inj. 12-11-78.

10-3-94: Acdz perfs w/3840' gals 20% HCL, RTI.

12/98 Parted casing.

5/07/01 P&A'd

Perforation detail:

4380-4710'

4380,98, 4408,19,32,42,52,4513,25,35,56,66,78,89,
 4600,12,
 30,40,50,60,74,86,98, 4710

PBTD: 4779'

TD: 4800'

Remarks:

**CURRENT
WELLBORE DIAGRAM**

Created: 1/15/2003 By: SMG
 Updated: 8/31/2011 By: chay
 Lease: Central Vacuum Unit
 Surface Location: 1980' FNL & 660' FEL
 Bottomhole Location:
 County: Lea St: NM
 Current Status: P&A'd 10/17/2001
 Directions to Wellsite: Buckeye, New Mexico

Well No.: 66
 Unit Ltr: H
 Unit Ltr:
 St Lease: B-155
 Elevation: 4000' GL

Field: Vacuum Grayburg San Andres
 Sec: 36 TSHP/Range: 17S-34E
 Sec: TSHP/Range:
 API: 30-025-02236 Cost Center:
 TEPI: BCT493000
 MVP: BCT494500

Surface Csg.

Size: 10 3/4"
 Wt.: 32.75#, LW
 Set @: 258'
 Sxs cmt: 200 sxs
 Circ: Yes
 TOC: Surface
 Hole Size: 12 1/4"

Intermediate Csg.

Size: 7 5/8"
 Wt.: 26.40#, LW
 Set @: 1536'
 Sxs Cmt: 200 sxs
 Circ: Yes
 TOC: 118', 60% FILL
 Hole Size: 9 7/8"

Production Csg.

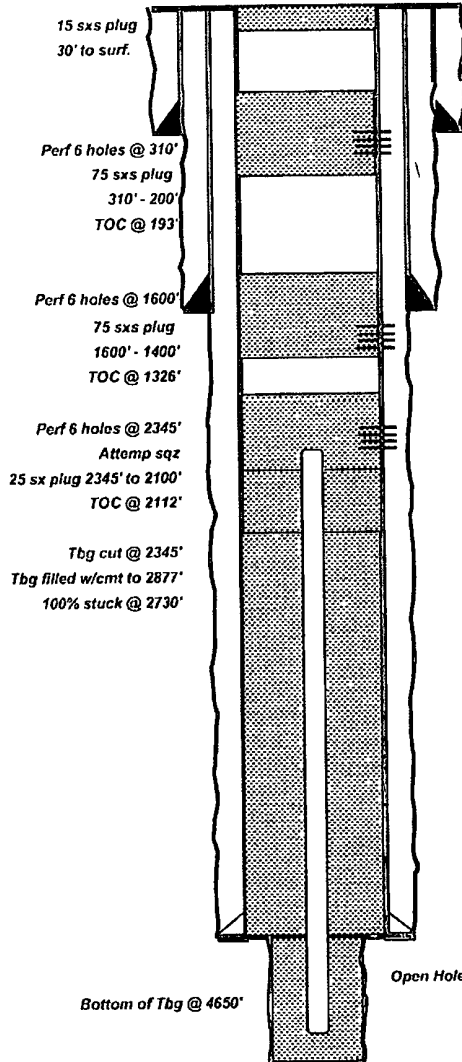
Size: 5 1/2"
 Wt.: 17#, SMLS
 Set @: 4098'
 Sxs Cmt: 250 sxs
 Circ: Yes
 TOC: Surface
 Hole Size: 6 3/4"

Open Hole

Hole Size: 6 3/4" & 4 3/4"
 Depth: 4098'-4728'

TD: 4750'

Well Plugged and Abandoned as of 10/17/01



KB:
 DF: 4009'
 GL: 4000'
 Original Spud Date: 4/12/1938
 Original Compl. Date: 5/14/1938

P&A'd 10/17/2001

Open Hole: 4098' - 4750'

TD: 4750'

Remarks: