



C-108 Review Checklist:

* see various attachments

Received:

Add. Request:

Reply Date:

Suspended:

ORDER TYPE: WFX / PMX / SWD Number:

945

Order Date:

04/13/15

Legacy Permits/Orders:

[see attached summary sheet]

Well No. 400

Well Name(s):

East Vacuum (GSA) Unit LEVGBSAU 3308-400

API: 30-025-34025

Spud Date: 8/15/97

New or Old: New

(UIC Class II Primacy 03/07/1982)

Footages

800 FNL / 330 FWL

Lot

or Unit

D

Sec

33

Tsp

17S

Rge

35E

County

Lea

General Location:

9 miles SSW of Lovington / 2 mi E Buckeye Vacuum Drunkard (abandoned)

Pool:

East Vacuum - GSA (active)

Pool No.:

62180

BLM 100K Map:

Hobbs

Operator:

Conoco Phillips

OGRID:

217817

Contact:

Susan Maunders/CP

COMPLIANCE RULE 5.9: Total Wells:

4548

Inactive:

3

Fincl Assur:

Yes

Compl. Order?

No

IS 5.9 OK?

Yes

Date: 04/13/15

WELL FILE REVIEWED

Current Status:

Currently approved for water injection; wish to add CO₂/produced gas

WELL DIAGRAMS: NEW: Proposed

or RE-ENTER: Before Conv.

After Conv.

Logs in Imaging:

CBL / GR / Density / Sonic

Planned Rehab Work to Well:

[TD / PB with CIP at 4840' / at 6440' / at 7600'] existing perf system in well

Well Construction Details		Sizes (in)	Setting	Cement	Cement Top and
		Borehole / Pipe	Depths (ft)	Sx or Cf	Determination Method
Planned ___ or Existing ☒ Surface		11 / 8 5/8	0 to 1545	650	circulated to surf.
Planned ___ or Existing ☒ Interm/Prod		8 5/8 / 5 1/2	0 to 8150	2750	circulated to surf. (1st stage)
Planned ___ or Existing ___ Interm/Prod				5986 (2 stage)	circulated (2nd stage)
Planned ___ or Existing ___ Prod/Liner					
Planned ___ or Existing ___ Liner					
Planned ___ or Existing ☒ OH (PERF)		6 5/8 - 7 1/4 / 7 1/4 - 7 7/8	Prod 2 - 4440 / Prod 3 - 4440 to 6077		
Injection Lithostratigraphic Units:		Depths (ft)	Injection or Confining Units	Tops	
Adjacent Unit: Litho. Struc. Por.			7 Rivers	3147	
Confining Unit: Litho. Struc. Por.			Queen	3688	
Proposed Inj Interval TOP:		4057	Grayburg	4057 / 3490	
Proposed Inj Interval BOTTOM:		5057	San Andres	4413	
Confining Unit: Litho. Struc. Por.			Glorieta	5933	
Adjacent Unit: Litho. Struc. Por.			Blueberry	6377	
Completion/Operation Details:					
Drilled TD		8150	PBTD	8050	
NEW TD			NEW PBTD	4840	
NEW Open Hole			or NEW P&A		
Tubing Size		2 3/8 in.	Inter Coated?	Yes	
Proposed Packer Depth			R-5987 ft		
Min. Packer Depth			(100-ft limit)		
Proposed Max. Surface Press.			PMX -	psi	
Admin. Inj. Press.			(0.2 psi per ft)		
AOR: Hydrologic and Geologic Information					
POTASH: R-111-P No Noticed? NA BLM Sec Ord No WIPPA Noticed? NA Salt/Salado T: B: NW: Cliff House fm					
FRESH WATER: Aquifer Ogallala / possible Santa Rita Max Depth HYDRO AFFIRM STATEMENT By Qualified Person					
NMOSE Basin: Lea CAPITAN REEF: thru adj NAO No. Wells within 1-Mile Radius? 2 FW Analysis					
Disposal Fluid: Formation Source(s) Produced water / Ogallala Analysis? On file On Lease Operator Only or Commercial					
Disposal Int: Inject Rate (Avg/Max BWPD): 500/1500 1.5 mm make up to protectable waters? No Source: Historical System: Closed or Open					
HC Potential: Producing Interval? Yes Formerly Producing? Yes Method: Logs/DST/P&A/Other Prior application 2-Mile Radius Pool Map					
AOR Wells: 1/2-M Radius Map? Yes Well List? Yes Total No. Wells Penetrating Interval: [20 new] Horizontals? No					
Penetrating Wells: No. Active Wells Num Repairs? on which well(s)? Diagrams? Yes - old with order					
Penetrating Wells: No. P&A Wells 20 Num Repairs? on which well(s)? 4 recent P&A + 16 recent P&A Diagrams? Yes					
NOTICE: Newspaper Date March 7th / 2015 All wells NMSLO Surface Owner NMSLO N. Date 02/02/15					
RULE 26.7(A): Identified Tracts? Yes Affected Persons: [11 wells - 28 parties mailed] N. Date					

Order Conditions:

Issues: - produced gas/reinjection authority - only by Hearing (?)

Add Order Cond:

Stipulate hearing to "clean-up" orders and provide for admin. approval of new wells for produced gas + CO₂



C-108 Review Checklist: Area Order

Supplemental Checklist for Multiple Well Application

ORDER TYPE WFX / PMX Number: 945 SUPPLEMENTAL PAGE 2 of 7

Relevant Hearing Order(s): See attached list

MULTIPLE WELL APPLICATION: 2 of 12 Well No. 511W Well Name(s): East Vacuum (GSA) Unit
API: 30-025 - Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)
Footages 1013 FNL / 418 FWL Lot — or Unit D Sec 33 Tsp 17S Rge 35E County Lea
WELL FILE REVIEWED ☒ Current Status: No case file - API pending
WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: NA
Planned Rehab Work to Well: New drill

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to 1584</u>	<u>200</u>	<u>Cir. to surface</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to 5075</u>	<u>None</u>	<u>Cir. to surface</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Liner	<u>7 7/8 / 5 1/2</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☒ or Existing ☐ OH / PERF	<u>12 1/4 / 9 5/8</u>	<u>4585 to 5039</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD — PBDT — NEW TD 5075 NEW PBDT —
NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size — in. Coated? Yes Prop. Packer Depth — ft Min. Depth — (100-ft limit)
Proposed Max. Surface Press. 1800 psi Admin. Inj. Press. — (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes
Specific Requirement(s) for Well: None CO2 R-6856

MULTIPLE WELL APPLICATION: 3 of 12 Well No. 512W Well Name(s): East Vacuum (GSA) Unit
API: 30-025 - Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)
Footages 1587 FSL / 986 FEL Lot — or Unit H Sec 32 Tsp 17S Rge 35E County Lea
WELL FILE REVIEWED ☒ Current Status: No well file - API pending
WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: NA
Planned Rehab Work to Well: New drill

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to 1578</u>	<u>200</u>	<u>Circulate to surf</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to 5100</u>	<u>None</u>	<u>Circulate to surf</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Liner	<u>7 7/8 / 5 1/2</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☒ or Existing ☐ OH / PERF	<u>12 1/4 / 9 5/8</u>	<u>4557 to 5058</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD — PBDT — NEW TD 5100 NEW PBDT —
NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size 2 3/8 in. Coated? Yes Prop. Packer Depth — ft Min. Depth — (100-ft limit)
Proposed Max. Surface Press. 1800 psi Admin. Inj. Press. — (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes
Specific Requirement(s) for Well: None CO2 R-6856



C-108 Review Checklist: Area Order

Supplemental Checklist for Multiple Well Application

ORDER TYPE: WFX / PMX Number: 945 SUPPLEMENTAL PAGE 3 of 7

Relevant Hearing Order(s): See list

MULTIPLE WELL APPLICATION: 4 of 12 Well No. 513W Well Name(s): East Vacuum (GSA) Unit
API: 30-0 25-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)
Footages * 2458 FNL / 442 FEL Lot - or Unit H Sec 32 Tsp 17S Rge 35E County Lea
WELL FILE REVIEWED ☒ Current Status: No API / no well file
WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: NA
Planned Rehab Work to Well: New Well; * BH location: 2332 FNL / 1054 FEL

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to 1581</u>	<u>~500</u>	<u>Cir. to surface</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to 521.5</u>	<u>None</u>	<u>Cir. to surface</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Planned ☐ or Existing ☐ Liner	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Planned ☒ or Existing ☐ OH / PERF	<u>7 7/8 / 5 1/2</u>	<u>4555 to 5041</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD - PBDT - NEW TD 5215 NEW PBDT -
NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size 2 3/8 in. Coated? Yes Prop. Packer Depth See R-5897-A ft Min. Depth - (100-ft limit)
Proposed Max. Surface Press. 1800 psi Admin. Inj. Press. - (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes
Specific Requirement(s) for Well: None CO2 R-6856

MULTIPLE WELL APPLICATION: 5 of 12 Well No. 516W Well Name(s): East Vacuum (GSA) Unit
API: 30-0 25-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)
Footages 2321 FSL / 940 FWL Lot - or Unit L Sec 33 Tsp 17S Rge 35E County Lea
WELL FILE REVIEWED ☒ Current Status: No API / no well file
WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: NA
Planned Rehab Work to Well: New Well

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to 1576</u>	<u>~500</u>	<u>Cir. to surface</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to 5110</u>	<u>None</u>	<u>Cir. to surface</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Planned ☐ or Existing ☐ Liner	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Planned ☒ or Existing ☐ OH / PERF	<u>7 7/8 / 5 1/2</u>	<u>4560 to 5047</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD - PBDT - NEW TD 5110 NEW PBDT -
NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size 2 3/8 in. Coated? Yes Prop. Packer Depth See R-5897-A ft Min. Depth - (100-ft limit)
Proposed Max. Surface Press. 1800 psi Admin. Inj. Press. - (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes
Specific Requirement(s) for Well: None CO2 R-6856



C-108 Review Checklist: Area Order

Supplemental Checklist for Multiple Well Application

ORDER TYPE: WFX / PMX Number: 945 SUPPLEMENTAL PAGE 4 of 7

Relevant Hearing Order(s): See list

MULTIPLE WELL APPLICATION: 6 of 12 Well No. 517W Well Name(s): East Vacuna (GSA) Unit
API: 30-0 25-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)
Footages 1815 FSL / 405 FWL Lot — or Unit L Sec 33 Tsp 17S Rge 35E County Lea
WELL FILE REVIEWED ☒ Current Status: No API - no well file
WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: NA
Planned Rehab Work to Well: New well / *BH location: 1660 FSL / 300 FWL

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to 1576</u>	<u>~500</u>	<u>Cir. to surf.</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to 5110</u>	<u>None</u>	<u>Cir. to surface</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☒ or Existing ☐ OH / PERF	<u>7 7/8 / 5 1/2</u>	<u>4578 to 5022</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD — PBDT — NEW TD 5110 NEW PBDT —
NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size 2 3/8 in. Coated? Yes Prop. Packer Depth — ft Min. Depth — (100-ft limit)
Proposed Max. Surface Press. 1350^{h2o} / 1800^{Co2} psi Admin. Inj. Press. — (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes
Specific Requirement(s) for Well: None R-6856

MULTIPLE WELL APPLICATION: 7 of 12 Well No. 520W Well Name(s): East Vacuna (GSA) Unit
API: 30-0 25-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)
Footages 471 FSL / 1759 FWL Lot — or Unit N Sec 33 Tsp 17S Rge 35E County Lea
WELL FILE REVIEWED ☒ Current Status: No API - No well file
WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: NA
Planned Rehab Work to Well: New Well

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to 1596</u>	<u>—</u>	<u>Cir. to surface</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to 5190</u>	<u>None</u>	<u>Cir. to surface</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☒ or Existing ☐ OH / PERF	<u>7 7/8 / 5 1/2</u>	<u>4634 to 5140</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD — PBDT — NEW TD 5190 NEW PBDT —
NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size 2 3/8 in. Coated? Yes Prop. Packer Depth — ft Min. Depth — (100-ft limit)
Proposed Max. Surface Press. 1350^{h2o} / 1800^{Co2} psi Admin. Inj. Press. — (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes
Specific Requirement(s) for Well: None R-6856



C-108 Review Checklist: Area Order

Supplemental Checklist for Multiple Well Application

ORDER TYPE: WFX / PMX Number: 945 SUPPLEMENTAL PAGE 5 of 7

Relevant Hearing Order(s): See list

MULTIPLE WELL APPLICATION: 8 of 12 Well No. 521W Well Name(s): East Vacuum (GSA) Unit

API: 30-0 25-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)

Footages 991 FSL / 2290 FWL Lot — or Unit N Sec 33 Tsp 17S Rge 35E County Lea

WELL FILE REVIEWED ☒ Current Status: NA - no API - no well file

WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: NA

Planned Rehab Work to Well: New well

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement (Sx or Cf)	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to 1595</u>	<u>~500</u>	<u>Cir. to surface</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to 5160</u>	<u>None</u>	<u>Cir. to surface</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☒ or Existing ☐ OH (PERF)	<u>7 7/8 / 5 1/2</u>	<u>4633 to 5120</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD — PBDT — NEW TD 5160 NEW PBDT —

NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size 2 3/8 in. Coated? Yes Prop. Packer Depth — ft Min. Depth — (100-ft limit)

Proposed Max. Surface Press. 1350 H₂O psi Admin. Inj. Press. — (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes

Specific Requirement(s) for Well: None R-6856

MULTIPLE WELL APPLICATION: 9 of 12 Well No. 522W Well Name(s): East Vacuum (GSA) Unit

API: 30-0 25-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)

Footages * 2310 / 1120 FWL Lot — or Unit L Sec 27 Tsp 17S Rge 35E County Lea

WELL FILE REVIEWED ☒ Current Status: NA - no API - no well file

WELL DIAGRAMS: NEW: Proposed ☐ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: NA

Planned Rehab Work to Well: New well / * BA location; 2338 FSL / 895 FWL

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement (Sx or Cf)	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to 1659</u>	<u>~500</u>	<u>Cir. to surface</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to 5131</u>	<u>None</u>	<u>Cir. to surface</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☒ or Existing ☐ OH / PERF	<u>7 7/8 / 5 1/2</u>	<u>4540' to 5037</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD — PBDT — NEW TD 5131 NEW PBDT —

NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size 2 3/8 in. Coated? Yes Prop. Packer Depth — ft Min. Depth — (100-ft limit)

Proposed Max. Surface Press. 1350 H₂O psi Admin. Inj. Press. — (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes

Specific Requirement(s) for Well: None R-6856



C-108 Review Checklist: Area Order

Supplemental Checklist for Multiple Well Application

ORDER TYPE: WFX PMX Number: 945 SUPPLEMENTAL PAGE 6 of 7

Relevant Hearing Order(s): See list

MULTIPLE WELL APPLICATION: 10 of 12 Well No. 523W Well Name(s): East Vacuum (GSA) Unit

API: 30-025-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)

Footages: * 2003 FNL / 1529 FWL Lot — or Unit F Sec 27 Tsp 17S Rge 35E County Lea

WELL FILE REVIEWED ☒ Current Status: NA - API pending - no well file

WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☒ After Conv. ☐ Logs in Imaging: NA

Planned Rehab Work to Well: New well / BH location: 2254 FNL / 1540 FWL

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to 1675</u>	<u>~500</u>	<u>Cir. to surface</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to 5122</u>	<u>None</u>	<u>Cir. to surface</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☒ or Existing ☐ OH / PERF	<u>7 7/8 / 5 1/2</u>	<u>4545 to 5045</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD — PBDT — NEW TD 5122 NEW PBDT —

NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size 2 3/8 in. Coated? Yes Prop. Packer Depth R-5897-A ft Min. Depth — (100-ft limit)

Proposed Max. Surface Press. 1350 H₂O psi Admin. Inj. Press. — (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes

Specific Requirement(s) for Well: None R-6856

MULTIPLE WELL APPLICATION: 11 of 12 Well No. 525W Well Name(s): East Vacuum (GSA) Unit

API: 30-025-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)

Footages: 1690 FSL / 2230 FEL Lot — or Unit J Sec 27 Tsp 17S Rge 35E County Lea

WELL FILE REVIEWED ☒ Current Status: NA - API pending - no well file

WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☒ After Conv. ☐ Logs in Imaging: NA

Planned Rehab Work to Well: New Well

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to</u>	<u>~500</u>	<u>Cir. to surface</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to</u>	<u>~700</u>	<u>Cir. to surface</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☒ or Existing ☐ OH / PERF	<u>7 7/8 / 5 1/2</u>	<u>4570 to 5030</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD — PBDT — NEW TD 5030 NEW PBDT —

NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size 2 3/8 in. Coated? Yes Prop. Packer Depth R-5897-A ft Min. Depth — (100-ft limit)

Proposed Max. Surface Press. 1350 H₂O psi Admin. Inj. Press. — (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes

Specific Requirement(s) for Well: None R-6856



C-108 Review Checklist: Area Order

Supplemental Checklist for Multiple Well Application

ORDER TYPE: WFX PMX Number: 945 SUPPLEMENTAL PAGE 7 of 7

Relevant Hearing Order(s): See list

MULTIPLE WELL APPLICATION: 12 of 12 Well No. 527W Well Name(s): East Vacuum (GSA) Units

API: 30-0 25-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)

Footages: * 1168 FSL / 2141 FWL Lot — or Unit N Sec 27 Tsp 17S Rge 3SE County Lea

WELL FILE REVIEWED ☒ Current Status: NA-no API/well file

WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: NA

Planned Rehab Work to Well: New well / BH location: 1015 FSL / 2250 FWL

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface	<u>12 1/4 / 9 5/8</u>	<u>0 to 1665</u>	<u>~500</u>	<u>Cr. to surface</u>
Planned ☒ or Existing ☐ Interm/Prod	<u>7 7/8 / 5 1/2</u>	<u>0 to 5110</u>	<u>None</u>	<u>Cr. to surface</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☒ or Existing ☐ OH (PERF)	<u>7 7/8 / 5 1/2</u>	<u>4580 to 5040</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD — PBDT — NEW TD 5110 NEW PBDT —

NEW Open Hole ☐ or NEW Perfs ☒ Tubing Size 2 3/8 in. Coated? Yes Prop. Packer Depth — ft Min. Depth — (100-ft limit)

Proposed Max. Surface Press. 1350-H₂O psi Admin. Inj. Press. — (0.2 psi per ft) ANY AREA IPI APPROVAL: Yes

Specific Requirement(s) for Well: None R-6856

MULTIPLE WELL APPLICATION: — of — Well No. — Well Name(s): —

API: 30-0 Spud Date: — New or Old: — (UIC Class II Primacy 03/07/1982)

Footages — Lot — or Unit — Sec — Tsp — Rge — County —

WELL FILE REVIEWED ☐ Current Status: —

WELL DIAGRAMS: NEW: Proposed ☐ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: —

Planned Rehab Work to Well: —

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ☐ or Existing ☐ Surface	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Interm/Prod	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Prod/Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ Liner	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned ☐ or Existing ☐ OH / PERF	<u>—</u>	<u>—</u>	<u>Inj Length</u>	<u>Hydrologic Information and AOR Well Summary on Coversheet</u>

Completion/Operation Details: Drilled TD — PBDT — NEW TD — NEW PBDT —

NEW Open Hole ☐ or NEW Perfs ☐ Tubing Size — in. Coated? — Prop. Packer Depth — ft Min. Depth — (100-ft limit)

Proposed Max. Surface Press. — psi Admin. Inj. Press. — (0.2 psi per ft) ANY AREA IPI APPROVAL: —

Specific Requirement(s) for Well: —

Orders Summary of East Vacuum Glorieta-San Andes Unit

Order	Case No.	Issued Date	Action Authorized
[R-3150]	3484	11/14/1966	Approved pilot waterflood project; <i>rescinded by R-5871.</i>
R-5871	6366	11/27/1978	Approved statutory unit; established Unitized interval/formation and area of project.
R-5897	6367	01/26/1979	Authorizes pressure maintenance project for unit and approves injection of water; establishes <i>Special Rules and Regulations for the East Vacuum Unit Pressure Maintenance Project</i> ; allows for administrative approval of pressure increases with SRT.
R-5897-A	14775	05/30/2012	Approves placement of packer "as close as reasonably possible to the uppermost perforation as long as packer remains within the unitized interval" (Rule 11 of <i>Special Rules</i>).
R-6856	7426	12/16/1981	Qualify project as Tertiary Recovery project for tax credit; lists 45 wells for injection of CO ₂ and water; amended R-5897 to allow maximum average BHP of 3150 psi for CO ₂ injection.
R-6856-A	7426 (Reopened)	09/19/1990	Allows the application of produced gas (hydrocarbon contaminated gas) and CO ₂ for 45 injection wells listed in R-6856 (<i>but does not contain authority for expansion of wells using produced gas injection with administrative orders</i>).
R-6856-B	10779	11/12/1993	Qualifies five areas of project for NM Enhanced Oil Recovery Act.
PMX-177		11/07/1994	Added five WAG wells (water and CO ₂); 1350 psi water and 1850 psi with CO ₂ .
PMX-246		05/18/2006	Added three WAG wells (water and CO ₂); 1350 psi water and 1850 psi with CO ₂ .
WFX-653 Corrected		02/10/1995	Added three injection wells (water only); corrected for legal description of proposed wells.
WFX-873		11/02/2010	Added three injection wells (water only).
WFX-877		01/11/2011	Added 11 injection wells (water only).
WFX-877-A		04/04/2011	Authorized conversion of 11 injection wells of WFX-871 to WAG wells (water and CO ₂); 1350 psi water and 1850 psi with CO ₂ .
WFX-884		04/28/2011	Added nine WAG wells (water and CO ₂); <i>only pressure stipulated was 1200 psi (no distinction regarding liquid or gas); also incorrectly references Order No. R-10017 (Vacuum Glorieta, East Unit)</i>
WFX-912		06/21/2013	Approved EVGSA Unit #400 well with smaller injection interval; applicant submitted new application
IPI (no order number)		09/06/1994	Pressure increases for EVGSA Unit #0524-129, #3315-001, #3333-002

BH data submitted by Phillips for R-6856 for pressure increase of CO₂
[partial]

EAST VACUUM GRAYBURG - SAN ANDRES UNIT
Summary of CO₂ Injection BHP Survey Results
for WAG Area 8

TRACT-WELL	SURFACE INJ. PRESSURE PSI	CO ₂ INJECTION RATE AT TOP PERF., MMSCFD	DEPTH OF TOP PERFORATION	*BOTTOM HOLE PRESSURE AT INJECTION RATE, PSI	+BOTTOM HOLE PARTING PRESSURE PSI
2622-W004	682	2.199	4,435'	2,244	3,128 ⁰
2622-W006	794	0.920	4,480'	2,368	3,570
2717-W003	606	0.228	4,394'	1,985	3,625
2717-W005	778	0.713	4,441'	2,382	3,488 ⁰
2717-W007	702	1.808	4,371'	2,242	3,250
2720-W006	787	0.863	4,410'	2,330	3,515
2721-W001	1,474	1.847	4,352'	3,116	3,370
2721-W002	790	1.858	4,376'	2,046	3,116 ⁰
2738-W007	621	1.655	4,362'	2,074	3,290
2738-W008	717	0.889	4,367'	2,233	3,440
2801-W005	524	1.213	4,488'	1,742	3,015 ⁰
2801-W006	643	1.154	4,411'	2,082	3,195
2801-W007	577	2.296	4,404'	1,996	3,000 ⁰
2801-W012	673	1.138	4,455'	2,204	3,435
2801-W015	1,033	1.597	4,433'	2,657	3,450
2865-W001	1,374	0.896	4,488'	3,035	4,070

* Pressure at top perforation

+ Parting pressure obtained from step rate tests, using water as the injection fluid, performed in January, 1986.

⁰ No identifiable parting pressure was observed, this is the maximum bottom hole pressure observed during the test.

RE6.2/evg4.1

SANTA FE

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(A) Owner of well Phillips Petroleum Company
 Street and Number Box 448
 City Buckeye, State New Mexico
 Well was drilled under Permit No. L-4829A and is located in the
1/4 SW 1/4 SW 1/4 of Section 19 Twp. 17S Rge. 35E
 (B) Drilling Contractor O. R. Musslewhite License No. WD99
 Street and Number Box 56
 City Hobbs, State New Mexico
 Drilling was commenced March 25, 1968
 Drilling was completed March 30, 1968

(Plat of 640 acres)

Elevation at top of casing in feet above sea level Unknown Total depth of well 210
 State whether well is shallow or artesian Shallow Depth to water upon completion 70

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	170	205	35	Sand, fine, unconsolidated
2				
3				
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
10 3/4	36	none	0	210	210	none	112	210

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5

PLUGGING RECORD

Name of Plugging Contractor _____ License No. _____

1968 JUL -8 AM 10:27
 STATE ENGINEER OFFICE
 SANTA FE, N.M.

