DATE IN 12.23.11	SUSPENSE	ENGINEER WIT	LOGGED IN 12.23.11	TYPE SWD 1303	APP NO pTGW 1135736575

Close 2/6/12

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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

ConocoPhillips 217817

Wilder Fed. 29 #1

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

29-26S-32E Lea

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 _____

RECEIVED OCD 2011 DEC 22 P 1:24

[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

5765'-5920'
1153PSF

[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.

Brian Maiorino		Regulatory Specialist	12/15/11
Print or Type Name	Signature	Title	Date

432-688-6913

brian.c.maiorino@conocophillips.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: ConocoPhillips Company

ADDRESS: 3300 N "A" Stasol, Bldg #6, Midland, TX 79705

CONTACT PARTY: Brian Maiorino w/ConocoPhillips Regulatory PHONE: 432-688-6913

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 __X__ No
If yes, give the Division order number authorizing the project: _____

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: Brian Maiorino TITLE: Regulatory Specialist

SIGNATURE: [signature] DATE: 12/15/11

E-MAIL ADDRESS: brian.d.maiorino@conocophillips.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

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

III. WELL DATA

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

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

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

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

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

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

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

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

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

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

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

VII.

1.Average 4,000 bbl/day maximum 10,000 bbl/day

2. Closed system

3. Maximum injection pressure 1,153 psi

4. See attached

5. See attached

VIII. Geologic Name: Bell Canyon, Thickness: 155', Projected injection depths: 5765'-5920' TVD, Lithologic Detail: Sandstone with some interbedded shale, very fine to fine grain, brittle, poorly consolidated, well sorted, light gray to light tan, some shale lenses present, calcareous cement.

IX. Well will be acidized in the Bell Canyon with 10,000 bbls as part of the initial completion.

X. Logs will be submitted with completion report after well is drilled.

XI. See attached

XII. See attached.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Conoco Phillips Company

WELL NAME & NUMBER: Wilcox 29 #1 SWD

WELL LOCATION: 2010' FNL 2560' FWL "F" 29 26S 32E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12 1/4" Casing Size: 9 5/8"

Cemented with: 280 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: _____

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft³

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 8 3/4" Casing Size: 7.0"

Cemented with: 540 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: _____

Total Depth: 6300'

Injection Interval

5765' TVD feet to 5920' TVD

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 3.5" Lining Material: TK-99 IPC

Type of Packer: nickel plated

Packer Setting Depth: 5,700'

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? _____

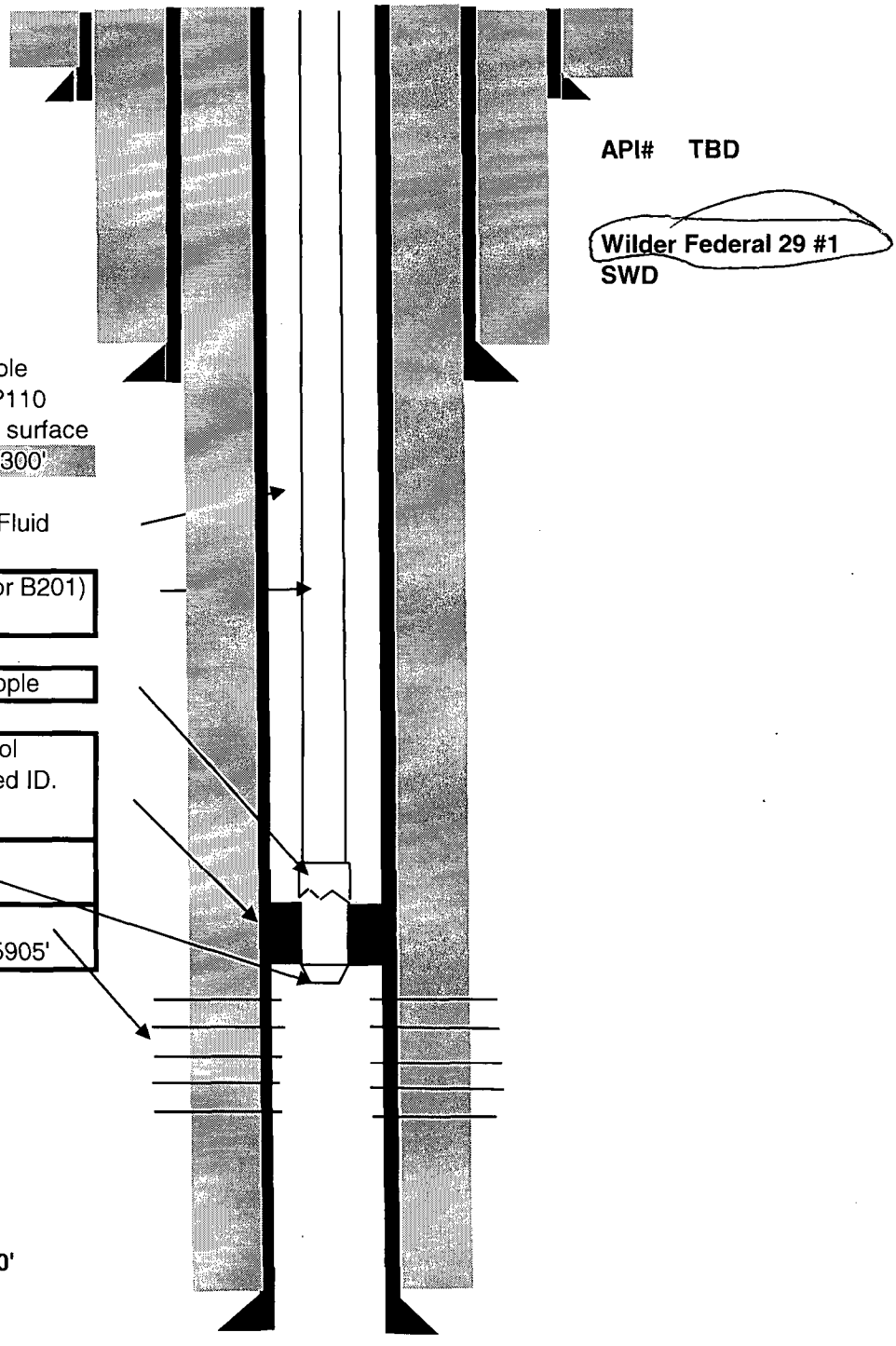
2. Name of the Injection Formation: Bell Canyon

3. Name of Field or Pool (if applicable): _____

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

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

Proposed


20"
Cmt. To surface
Set @ 40'
12 1/4" hole
9 5/8" 36# J-55
Cmt. To Surface
Set @ 950'
API# TBD
Wilder Federal 29 #1
SWD
8 3/4" hole
7" 26# P110
Cmt. To surface
Set @ 6300'
Packer Fluid
IPC Tubing (TK99 or B201)
3 1/2" 9.3# L-80
On/Off tool W/ F nipple
W/ Mesquite Oil Tool
AS1X, has ni-coated ID.
Set @ 5700'
Wire Line guide
re-entrance Tool
Delaware
Perforations 5745-5905'
Proposed TD 6300'

Red Hills West SWD Well Proposal

ConocoPhillips, Wilder Federal 29 1SWD
Sect 29-T26S-R32E
2010' FNL & 2560'FWL
Lea Co. NM

Geologic Summary:

The proposed subject SWD well (ConocoPhillips, Wilder Federal 29 1SWD) will be located in section 29, T26S-R32E in Lea County, New Mexico. This geologic evaluation includes all of T26S-R32E in the interval from the top of the Delaware Bell Canyon to the top of the Lower Cherry Canyon. The Upper Delaware Bell Canyon sand members known as the Ramsey and Olds' sands are the only zones that have been found productive in or in the immediate area around this township. These Sands occur within the top 200' of the Delaware Bell Canyon Formation at a depth from 4,441' to 4,587' in the ConocoPhillips, Wilder Federal 28 1H located 7,545' southeast of the proposed Wilder Federal 29 1SWD location

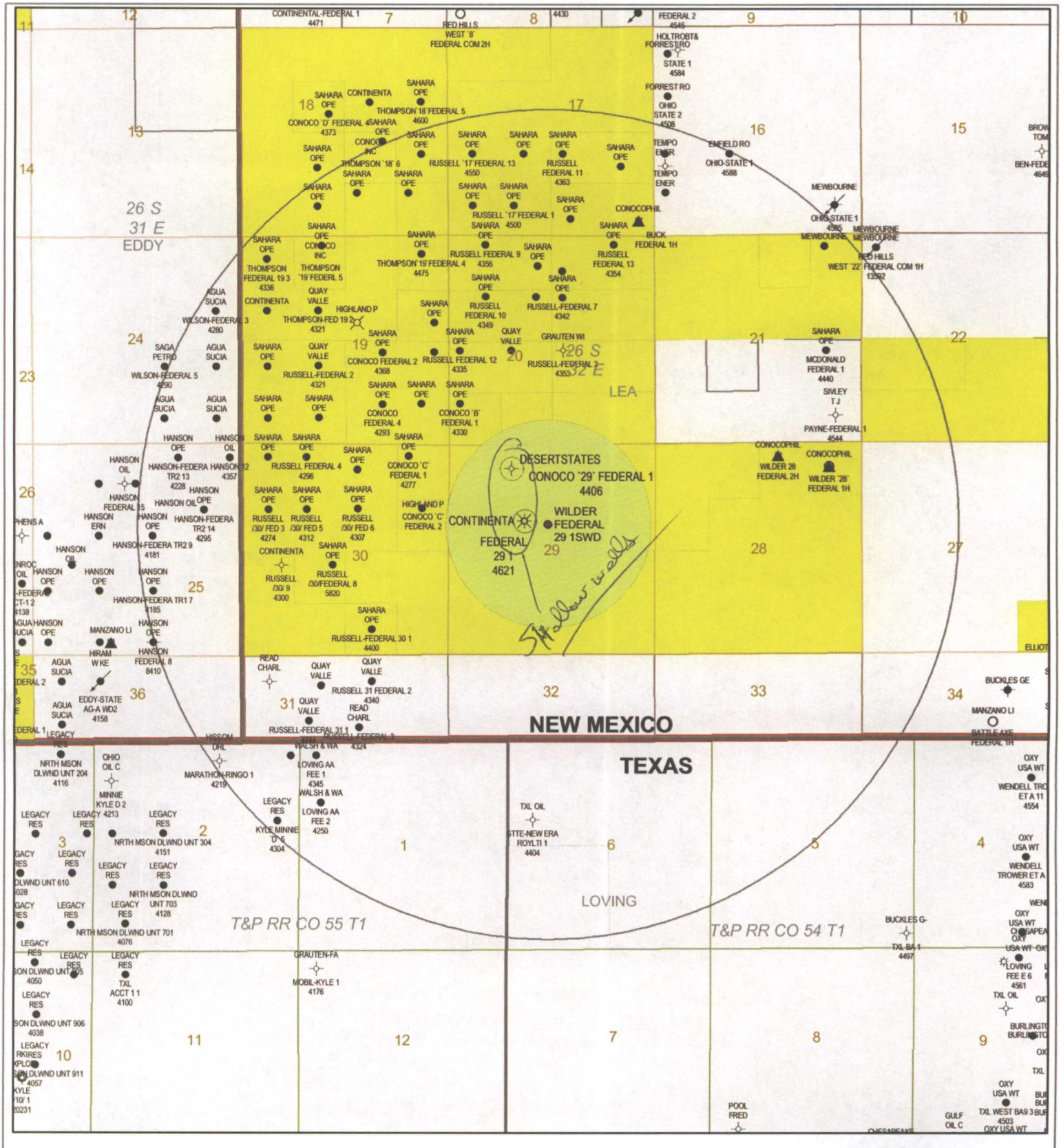
The interval indentified for salt water disposal is the Lower Bell Canyon Sand from 5,818' to 6,086' in the ConocoPhillips, Wilder Federal 28 1H. This well is the most recent penetration of the proposed SWD interval. This interval is composed of non-productive sandstones that have good porosity and permeability with numerous thin shales and carbonates that are very continuous across the area. This interval had no mudlog shows of significance when penetrated in the ConocoPhillips, Wilder Federal 28 1H. Water saturation calculations from open hole logs in this well indicate that the interval is wet and non-productive.

The interval thickness between the base of the Ramsey and Olds Sands and the top of the proposed water disposal zone is 1,230' in the ConocoPhillips, Wilder Federal 28 1H. The interval contains nine relatively thin shales that are continuous across the area. At the location of the proposed ConocoPhillips Wilder Federal 29 1SWD well, the interval thickness between the base of the Ramsey and Olds Sands and the top of the proposed water disposal zone is projected to be 1,222'. The gross thickness along with interbedded shales throughout the area should act as a low permeability barrier between the disposal interval and the Upper Delaware Bell Canyon Sands. Also, the proposed location for SWD is more than a 3,785' from any Delaware production.

For the reasons mentioned above, this interval appears to have no potential for oil or gas production at the proposed location of the Wilder Federal 29 1SWD and will be a good interval for salt water disposal. A review of geologic and engineering data in the immediate area of this SWD, finds that there is no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

Harvey O. Vick III
Geologist, ConocoPhillips

API	WELL_NAME	WELL #	SHORT_NAME	CURR_OPERA	Status	SPUD	Depth	HOLE	LEASE_NAME	Location	Footage
300253166400	CONOCO `29` FEDERAL	1	CONOCO `29` FEDERAL	DESERT STATES ENERGY INC	TA	8/15/1992	4406	VERTICAL	CONOCO `29` FEDERAL	29 26S 32E	660 FNL 1650 FWL
300250830100	WILDER `29`	1	WILDER `29`	ConocoPhillips	PA	7/3/1979	4621	VERTICAL	WILDER `29`	29 26S 32E	1980 FNL 1980 FWL



P2000 WELL HEADERS

STATUS

- OIL
- GAS
- OIL & GAS
- DA:ABAND
- START
- LOC
- INJ & SERVICE
- JA
- SUS

- Wells inside Area of Review
- PROPOSED WILDER FEDERAL 29 #1SWD
- ONE-HALF MILE RADIUS CIRCLE
- TWO MILE RADIUS CIRCLE
- COP LEASES

NAD27
New Mexico East(3001)

0 2,500 5,000 Feet

ConocoPhillips

Permian Basin

New Mexico

COP Wilder Federal 29 #1 SWD
Application
Lea county

Author:	Date: 12/16/2011
Compiled by: jcdavis	Scale:
Project File:	

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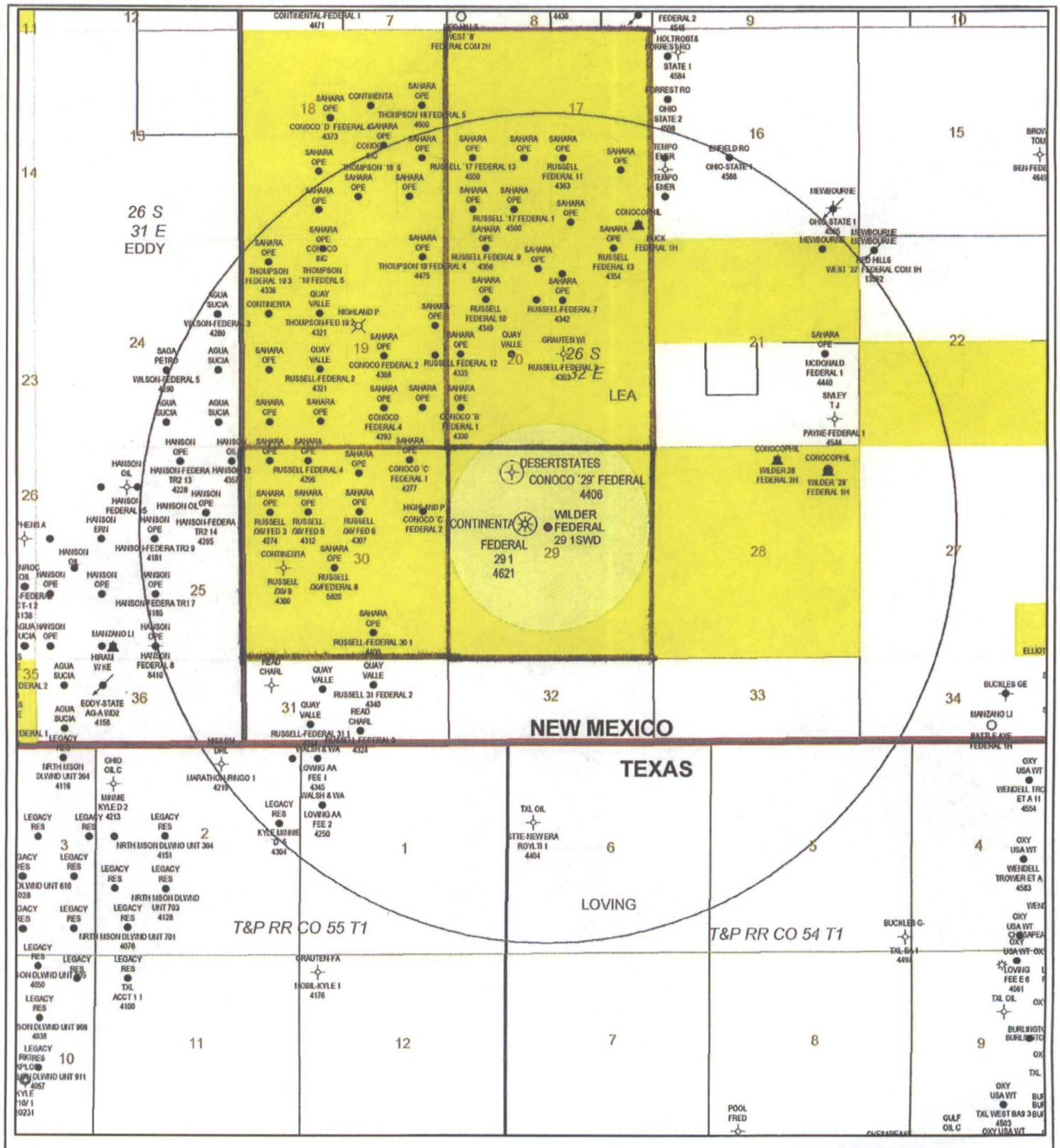
26 S
31 E
EDDY
26 S
32 E
LEA
NEW MEXICO
TEXAS
LOVING
T&P RR CO 55 T1
T&P RR CO 54 T1
DESERTSTATES CONOCO '29' FEDERAL 4406
CONTINENTA FEDERAL 29 1 4621
WILDER FEDERAL 29 1SWD
P2000 WELL HEADERS
STATUS
OIL
GAS
OIL & GAS
DA:ABAND
START
LOC
INJ & SERVICE
JA
SUS
Wells inside Area of Review
PROPOSED WILDER FEDERAL 29 #1SWD
ONE-HALF MILE RADIUS CIRCLE
TWO MILE RADIUS CIRCLE
COP LEASES
NAD27
New Mexico East(3001)
0 2,500 5,000
Feet
ConocoPhillips
Permian Basin
New Mexico
COP Wilder Federal 29 #1 SWD
Application
Lea county
Author:
Date: 12/16/2011
Compiled by: cdavis
Scale:
Project File:
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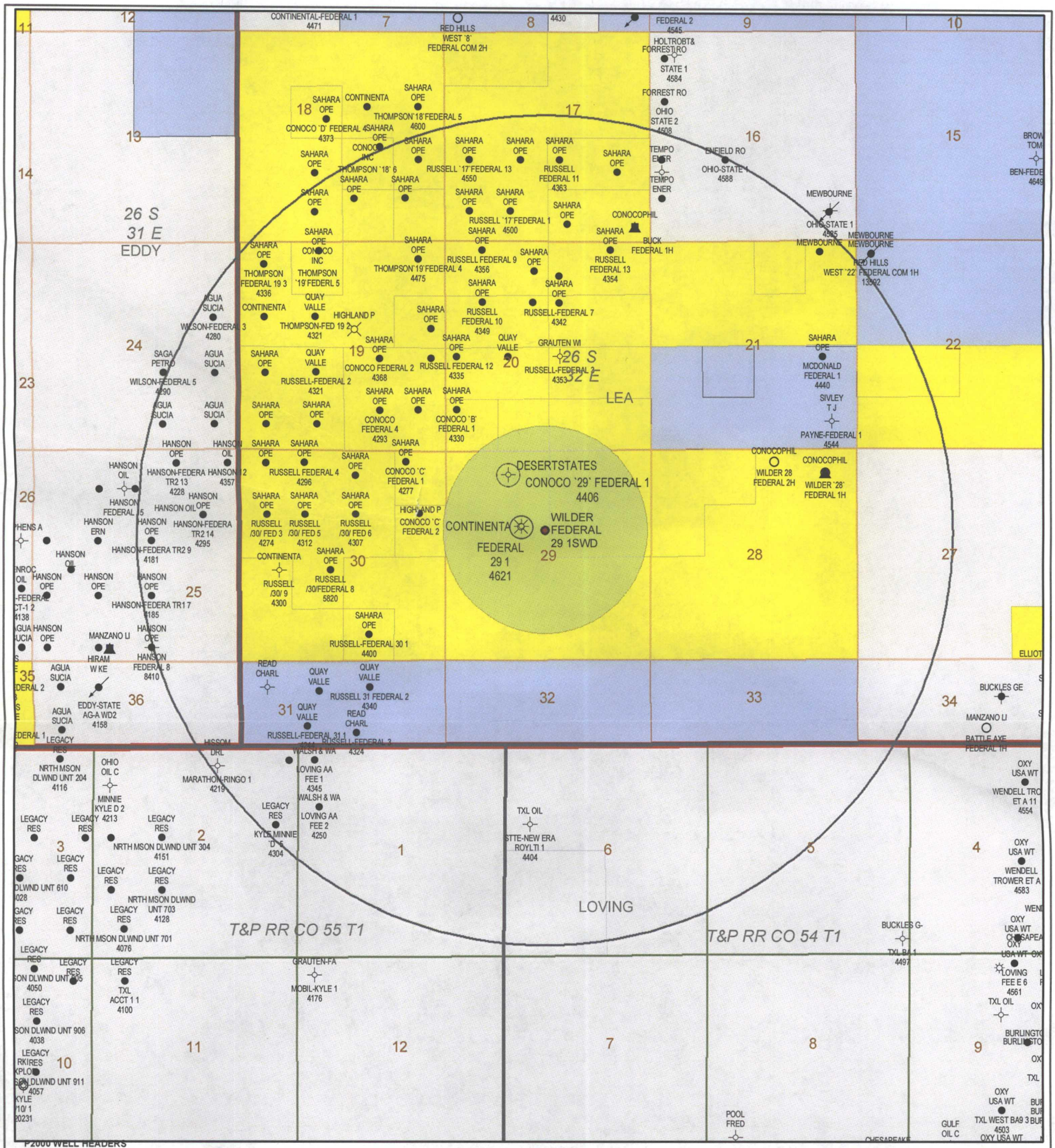

P2000 WELL HEADERS

STATUS

- OIL
- GAS
- OIL & GAS
- DA:ABAND
- START
- LOC
- INJ & SERVICE
- JA
- SUS
- Wells inside Area of Review
- PROPOSED WILDER FEDERAL 29 #1SWD
- ONE-HALF MILE RADIUS CIRCLE
- TWO MILE RADIUS CIRCLE
- JCD_RH_Tobin_leases

NAD27
New Mexico East(3001)

N W E S

0 2,500 5,000 Feet

ConocoPhillips

Permian Basin

New Mexico

COP Wilder Federal 29 #1 SWD
Application
Lea county

Author:	Date: 12/14/ 2011
Compiled by: jcdavis	Scale:
Project File:	

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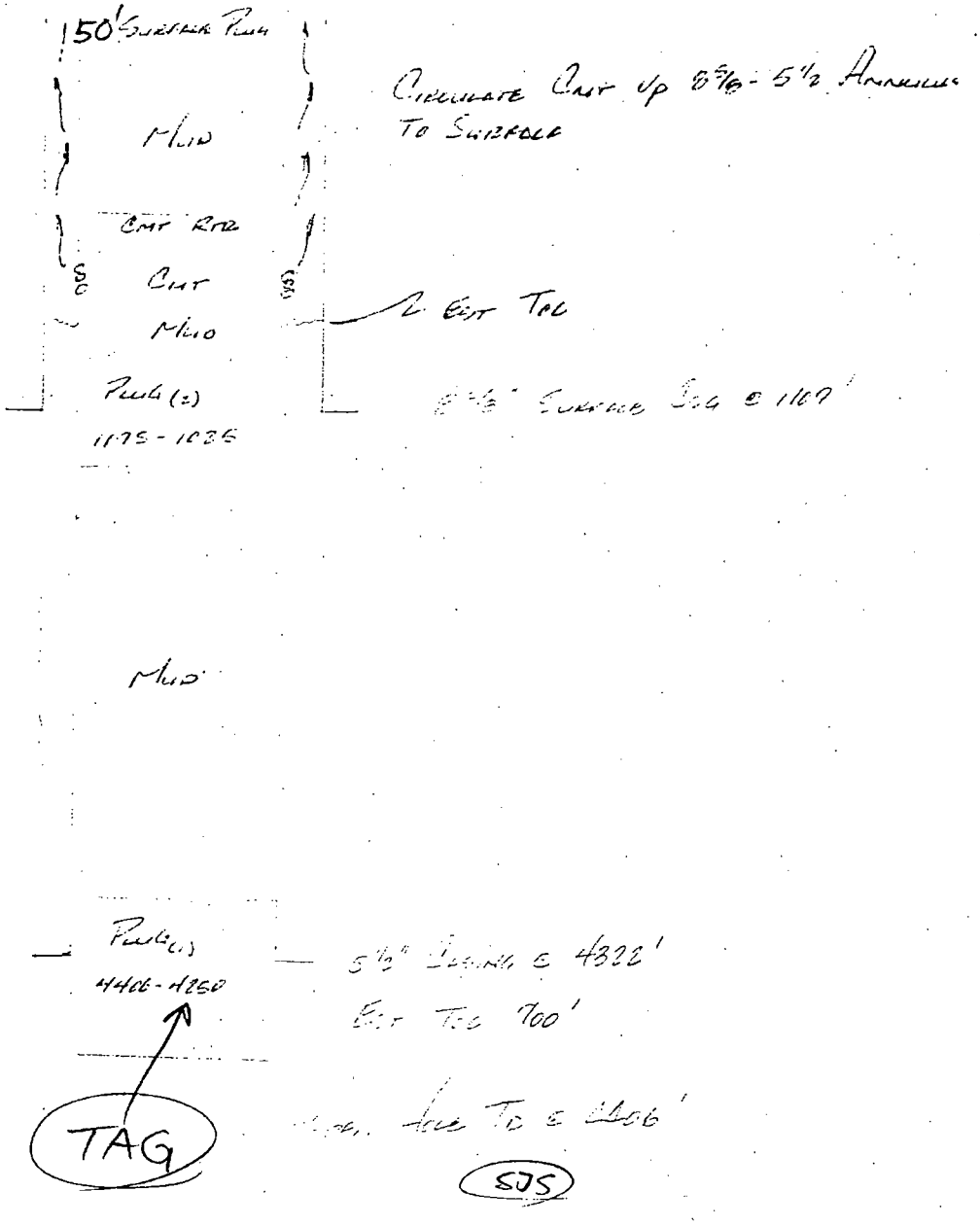
WELLBORE SCHEMATIC

Cardco Fed "29"-1

1650' FNL & 660' FWL Sec 29

T-26-S, R-32-E Lea Cty



Combined

DownHole SAT(tm)

CHEMISTRY OF WATER SOURCES MIXED

1) MEWBOURNE OIL COMPA 2) MEWBOURNE OIL COMPA
3) MEWBOURNE OIL COMPA

Report Date: 05-05-2011

	1	2	3
	% BY WEIGHT		
CATIONS	**33.33**	**33.33**	**33.33**
Calcium(as Ca)	2490	689.00	2347
Magnesium(as Mg)	730.00	117.00	3546
Barium(as Ba)	0.900	1.66	1.70
Strontium(as Sr)	205.00	238.00	900.00
Sodium(as Na)	61500	68000	81390
Potassium(as K)	1438	1290	1323
Lithium(as Li)	0.00	0.00	0.00
Iron(as Fe)	110.00	65.00	6.87
Ammonia(as NH_3)	0.00	0.00	0.00
Aluminum(as Al)	0.00	0.00	0.00
Boron(as B)	0.00	0.00	0.00
Manganese (as Mn)	1.08	0.960	28.00
Zinc (as Zn)	0.00	0.00	0.00
Lead (as Pb)	0.00	0.00	0.00
ANIONS			
Chloride(as Cl)	104000	106000	145300
Sulfate(as SO_4)	1750	1200	500.00
Bromine (as Br)	0.00	0.00	0.00
Dissolved CO_2	0.3	0.3	22.6
Bicarbonate	2416.0	2135.0	85.0
Carbonate	0.0	0.0	0.0
Silica(as SiO_2)	0.00	0.00	0.00
Phosphate(as PO_4)	0.00	0.00	0.00
H_2S(as H_2S)	3.06	3.04	2.88
Fluoride(as F)	0.00	0.00	0.00
Nitrate(as NO_3)	0.00	0.00	0.00
PARAMETERS			
pH	6.70	6.50	5.00
Temperature(°F)	100.00	100.00	100.00
Pressure(atm)	14.70	14.70	14.70
Density(g/mL)	1.11	1.12	1.14
Calculated TDS	174372	179504	235410

1. Red Hills 8 #1H (Avalon)
2. Red Hills 22 #1H (Avalon)
3. Russell Fed 17 (Delaware)

BJ Chemical Services - Midland Analytical Laboratory
P.O. Box 61427, Midland, Texas 79711

Combined

DownHole SAT(tm)

DEPOSITION INDICATORS OF SOURCE WATERS MIXED

1) MEWBOURNE OIL COMPA 2) MEWBOURNE OIL COMPA
3) MEWBOURNE OIL COMPA

Report Date: 05-05-2011

	1	2	3
	% BY WEIGHT		
SATURATION LEVEL	**33.33**	**33.33**	**33.33**
Calcite	14.24	2.80	0.00756
Aragonite	12.07	2.37	0.00640
Witherite	< 0.001	< 0.001	< 0.001
Strontianite	1.04	0.848	0.00129
Magnesite	5.63	0.645	0.0179
Anhydrite	0.374	0.0881	0.0753
Gypsum	0.432	0.101	0.0792
Barite	2.06	3.22	0.419
Celestite	0.457	0.448	0.216
Calcium phosphate	0.00	0.00	0.00
Hydroxyapatite	0.00	0.00	0.00
Fluorite	0.00	0.00	0.00
Silica	0.00	0.00	0.00
Brucite	< 0.001	< 0.001	< 0.001
Mag. silicate	0.00	0.00	0.00
Ferric hydroxide	< 0.001	< 0.001	< 0.001
Siderite	597.55	249.88	0.0110
Strengite	0.00	0.00	0.00
Halite	0.0998	0.113	0.234
Thenardite	< 0.001	< 0.001	< 0.001
Iron sulfide	28.64	8.67	0.00154
SIMPLE INDICES			
Langelier	1.67	0.865	-1.32
Ryznar	3.36	4.77	7.64
Oddo-Tomson	0.594	-0.213	-2.34
Stiff-Davis	1.39	0.600	-1.09
Puckorius	0.822	2.12	5.58
Larson-Skold	83.11	95.79	3375

1 RH 8#1H (Avalon)
2 RH 22#1H (Avalon)
3 Rossell Fed 17 (Delaware)

BJ Chemical Services - Midland Analytical Laboratory
P.O. Box 61427, Midland, Texas 79711

Combined

DownHole SAT(tm)

MIXED WATER CHEMISTRY

1) MEWBOURNE OIL COMPA 2) MEWBOURNE OIL COMPA
3) MEWBOURNE OIL COMPA

Report Date: 05-05-2011

CATIONS		ANIONS	
Calcium (as Ca)	1842	Chloride (as Cl)	118433
Magnesium (as Mg)	1464	Sulfate (as SO_4)	1150
Barium (as Ba)	1.42	Bromine (as Br)	0.00
Strontium (as Sr)	447.67	Dissolved CO_2 (as CO_2)	7.73
Sodium (as Na)	70297	Bicarbonate (as HCO_3)	1361
Potassium (as K)	1350	Carbonate (as CO_3)	11.76
Lithium (as Mg)	0.00	Silica (as SiO_2)	0.00
Ammonia (as NH_3)	0.00	H_2S (as H_2S)	2.99
Aluminum (as Al)	0.00	Phosphate (as PO_4)	0.00
Iron (as Fe)	60.62	Nitrate (as NO_3)	0.00
Boron (as B)	0.00	Fluoride (as F)	0.00
Manganese (as Mn)	10.01		
Zinc (as Zn)	0.00		
Lead (as Pb)	0.00		

PARAMETERS

Calculated T.D.S.	196567
Temperature (^oF)	100.00
Density(g/mL)	1.12
Pressure(atm)	14.70
Calculated T.D.S.	196567
Molar Conductivity	17385

CORROSION RATE PREDICTION

CO_2 - H_2S Rate(mpy)	0.00

BJ Chemical Services - Midland Analytical Laboratory
P.O. Box 61427, Midland, Texas 79711

Combined

DownHole SAT(tm)

MIXED WATER DEPOSITION POTENTIAL INDICATORS

1) MEWBOURNE OIL COMPA 2) MEWBOURNE OIL COMPA
3) MEWBOURNE OIL COMPA

Report Date: 05-05-2011

SATURATION LEVEL	
Calcite ($CaCO_3$)	3.16
Aragonite ($CaCO_3$)	2.68
Witherite ($BaCO_3$)	< 0.001
Strontianite ($SrCO_3$)	0.533
Magnesite ($MgCO_3$)	3.56
Anhydrite ($CaSO_4$)	0.178
Gypsum ($CaSO_4*2H_2O$)	0.199
Barite ($BaSO_4$)	1.64
Celestite ($SrSO_4$)	0.503
Fluorite (CaF_2)	0.00
Calcium phosphate	0.00
Hydroxyapatite	0.00
Silica (SiO_2)	0.00
Brucite ($Mg(OH)_2$)	< 0.001
Magnesium silicate	0.00
Iron hydroxide ($Fe(OH)_3$)	< 0.001
Strengite ($FePO_4*2H_2O$)	0.00
Siderite ($FeCO_3$)	79.02
Halite (NaCl)	0.140
Thenardite ($Na2SO_4$)	< 0.001
Iron sulfide (FeS)	4.62

MOMENTARY EXCESS (Lbs/1000 Barrels)	
Calcite ($CaCO_3$)	0.105
Aragonite ($CaCO_3$)	0.0958
Witherite ($BaCO_3$)	-28.09
Strontianite ($SrCO_3$)	-0.197
Magnesite ($MgCO_3$)	0.0926
Anhydrite ($CaSO_4$)	-633.16
Gypsum ($CaSO_4*2H_2O$)	-641.13
Barite ($BaSO_4$)	0.328
Celestite ($SrSO_4$)	-119.65
Fluorite (CaF_2)	-5.92
Calcium phosphate	>-0.001
Hydroxyapatite	-334.88
Silica (SiO_2)	-41.28
Brucite ($Mg(OH)_2$)	-0.256
Magnesium silicate	-107.46
Iron hydroxide ($Fe(OH)_3$)	< 0.001
Strengite ($FePO_4*2H_2O$)	>-0.001
Siderite ($FeCO_3$)	0.175
Halite (NaCl)	-103740
Thenardite ($Na2SO_4$)	-85816
Iron sulfide (FeS)	0.430

SIMPLE INDICES	
Langelier	1.07
Ryznar	4.22
Puckorius	1.64
Larson-Skold Index	148.23
Stiff Davis Index	0.957
Oddo-Tomson	-0.00539

BOUND IONS	TOTAL	FREE
Calcium	1842	1643
Barium	1.42	1.42
Carbonate	11.76	0.263
Phosphate	0.00	0.00
Sulfate	1150	395.19

OPERATING CONDITIONS

Temperature (°F)	100.00
Time(secs)	1.00

BJ Chemical Services - Midland Analytical Laboratory
P.O. Box 61427, Midland, Texas 79711

Analytical Laboratory Report for:
MEWBOURNE OIL COMPANY
Account Representative:
Mossman, Willis

BAKER HUGHES

Production Water Analysis

Listed below please find water analysis report from: [redacted] Russell Fed 17

Lab Test Number	Sample Date
2011111305 [ ]	05/03/2011

Delaware

Specific Gravity:	1.142
TDS:	218188
pH:	5.00

Cations:	mg/L	as:
Calcium	2347	(Ca^{++})
Magnesium	3546	(Mg^{++})
Sodium	64150	(Na^{+})
Iron	6.87	(Fe^{++})
Potassium	1323.0	(K^{+})
Barium	1.70	(Ba^{++})
Strontium	900.00	(Sr^{++})
Manganese	28.00	(Mn^{++})
Anions:	**mg/L**	**as:**
Bicarbonate	85	(HCO_3^{-})
Sulfate	500	($SO_4^{=}$)
Chloride	145300	(Cl^{-})
Gases:		
Carbon Dioxide	150	(CO_2)
Hydrogen Sulfide	0.0	(H_2S)

Russel Fed 17
Delaware

Analytical Laboratory Report for:
MEWBOURNE OIL COMPANY
Account Representative:
Mossman, Willis

BAKER HUGHES

DownHole SAT™ Scale Prediction @ 100 deg. F

[
]

Lab Test Number	Sample Date	Location
2011111305	05/03/2011	Russell Fed 17

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO3)	0.01	-
Strontianite (SrCO3)	0.00	-0.07
Anhydrite (CaSO4)	0.08	-0.64
Gypsum (CaSO4*2H2O)	0.08	-1427.49
Barite (BaSO4)	0.42	-1541.08
Celestite (SrSO4)	0.22	-3.90
Siderite (FeCO3)	0.01	-501.39
Halite (NaCl)	0.23	-0.06
Iron sulfide (FeS)	0.00	-223502.44
Calcite (CaCO3)	0.01	-9.96
Strontianite (SrCO3)	0.00	-0.07
Anhydrite (CaSO4)	0.08	-0.64
Gypsum (CaSO4*2H2O)	0.08	-1427.49
Barite (BaSO4)	0.42	-1541.08
Celestite (SrSO4)	0.22	-3.90
Siderite (FeCO3)	0.01	-501.39
Halite (NaCl)	0.23	-0.06
Iron sulfide (FeS)	0.00	-223502.44
		-9.96

Interpretation of DHSat Results:
The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) to positive (precipitating) values. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

Analytical Laboratory Report for:
MEWBOURNE OIL COMPANY
Account Representative:
Mossman, Willis

BAKER HUGHES

Production Water Analysis

Listed below please find water analysis report from: Red Hills 22 Federal, 1

Lab Test Number	Sample Date
2011111304 [ ]	05/03/2011

Specific Gravity:	1.117
TDS:	179737
pH:	6.50

Cations:	mg/L	as:
Calcium	689	(Ca^{++})
Magnesium	117	(Mg^{++})
Sodium	68000	(Na^{+})
Iron	65.00	(Fe^{++})
Potassium	1290.0	(K^{+})
Barium	1.66	(Ba^{++})
Strontium	238.00	(Sr^{++})
Manganese	0.96	(Mn^{++})
Anions:	**mg/L**	**as:**
Bicarbonate	2135	(HCO_3^{-})
Sulfate	1200	($SO_4^{=}$)
Chloride	106000	(Cl^{-})
Gases:		
Carbon Dioxide	250	(CO_2)
Hydrogen Sulfide	0.0	(H_2S)

Red Hills 22#1H

Analytical Laboratory Report for:
MEWBOURNE OIL COMPANY
Account Representative:
Mossman, Willis

BAKER HUGHES

DownHole SAT™ Scale Prediction @ 100 deg. F

[
]

Lab Test Number	Sample Date	Location
2011111304	05/03/2011	1

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO3)	2.80	0.81
Strontianite (SrCO3)	0.85	-0.33
Anhydrite (CaSO4)	0.09	-2984.15
Gypsum (CaSO4*2H2O)	0.10	-3062.40
Barite (BaSO4)	3.22	1.94
Celestite (SrSO4)	0.45	-354.38
Siderite (FeCO3)	250.14	1.45
Halite (NaCl)	0.11	-329277.63
Iron sulfide (FeS)	0.00	-0.22

Interpretation of DHSat Results:
The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) to positive (precipitating) values. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

Analytical Laboratory Report for:
MEWBOURNE OIL COMPANY
Account Representative:
Mossman, Willis

BAKER HUGHES

Production Water Analysis

Listed below please find water analysis report from: Red Hills 8 Federal, 1H

Lab Test Number	Sample Date
2011111303	05/03/2011

[
]

Specific Gravity:	1.114
TDS:	174641
pH:	6.70

Cations:	mg/L	as:
Calcium	2490	(Ca^{++})
Magnesium	730	(Mg^{++})
Sodium	61500	(Na^{+})
Iron	110.00	(Fe^{++})
Potassium	1438.0	(K^{+})
Barium	0.90	(Ba^{++})
Strontium	205.00	(Sr^{++})
Manganese	1.08	(Mn^{++})
Anions:	**mg/L**	**as:**
Bicarbonate	2416	(HCO_3^{-})
Sulfate	1750	($SO_4^{=}$)
Chloride	104000	(Cl^{-})
Gases:		
Carbon Dioxide	270	(CO_2)
Hydrogen Sulfide	0.0	(H_2S)

Red Hills 8#1H

Analytical Laboratory Report for:
MEWBOURNE OIL COMPANY
Account Representative:
Mossman, Willis

BAKER HUGHES

DownHole SAT™ Scale Prediction @ 100 deg. F

[
]

Lab Test Number	Sample Date	Location
2011111303	05/03/2011	1H

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO3)	14.26	1.66
Strontianite (SrCO3)	1.04	0.09
Anhydrite (CaSO4)	0.37	-1280.31
Gypsum (CaSO4*2H2O)	0.43	-1168.76
Barite (BaSO4)	2.06	0.79
Celestite (SrSO4)	0.46	-328.97
Siderite (FeCO3)	598.24	2.06
Halite (NaCl)	0.10	-341007.44
Iron sulfide (FeS)	0 00	-0.08

Interpretation of DHSat Results:
The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) to positive (precipitating) values. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

BAKER HUGHES

Water Analysis

Date: 13-May-11

2708 West County Road, Hobbs NM 88240
Phone (575) 392-5556 Fax (575) 392-7307

Freshwater well #1
21K-26S-32E

Analyzed For

Company	Well Name	County	State
Mewbourne	[redacted]	Lea	New Mexico

Sample Source	**Source**	***Sample #***	**House**
Formation		***Depth***	

Specific Gravity	**1.000**	*SG @ 60 °F*	**1.002**
pH	**7.09**	*Sulfides*	**Absent**
Temperature (°F)	**70**	*Reducing Agents*	

Cations

Sodium (Calc)	*in Mg/L*	**606**	*in PPM*	**605**
Calcium	*in Mg/L*	**156**	*in PPM*	**156**
Magnesium	*in Mg/L*	**29**	*in PPM*	**29**
Soluable Iron (FE2)	*in Mg/L*	**0.0**	*in PPM*	**0**

Anions

Chlorides	*in Mg/L*	**600**	*in PPM*	**599**
Sulfates	*in Mg/L*	**850**	*in PPM*	**848**
Bicarbonates	*in Mg/L*	**112**	*in PPM*	**112**
Total Hardness (as CaCO3)	*in Mg/L*	**510**	*in PPM*	**509**
Total Dissolved Solids (Calc)	*in Mg/L*	**2,353**	*in PPM*	**2,348**
Equivalent NaCl Concentration	*in Mg/L*	**1,863**	*in PPM*	**1,860**

Scaling Tendencies

Calcium Carbonate Index* **17,509

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

Calcium Sulfate (Gyp) Index* **132,600

Below 500,000 Remote / 500,000 - 10,000,00 Possible / Above 10,000,000 Probable

****This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.***

Remarks

Report # 3161

BAKER HUGHES

Water Analysis

Date: 13-May-11

2708 West County Road, Hobbs NM 88240
Phone (575) 392-5556 Fax (575) 392-7307

Freshwater Well #2
21K-26S-32E

Analyzed For

Company	Well Name	County	State
Mewbourne	[redacted]	Lea	New Mexico

Sample Source	**Source**	***Sample #***	**Stock**
Formation		***Depth***	

Specific Gravity	**1.000**	*SG @ 60 °F*	**1.002**
pH	**7.47**	*Sulfides*	**Absent**
Temperature (°F)	**70**	*Reducing Agents*	

Cations

Sodium (Calc)	*in Mg/L*	**478**	*in PPM*	**477**
Calcium	*in Mg/L*	**92**	*in PPM*	**92**
Magnesium	*in Mg/L*	**14**	*in PPM*	**14**
Soluable Iron (FE2)	*in Mg/L*	**0.0**	*in PPM*	**0**

Anions

Chlorides	*in Mg/L*	**400**	*in PPM*	**399**
Sulfates	*in Mg/L*	**670**	*in PPM*	**669**
Bicarbonates	*in Mg/L*	**78**	*in PPM*	**78**
Total Hardness (as CaCO3)	*in Mg/L*	**290**	*in PPM*	**289**
Total Dissolved Solids (Calc)	*in Mg/L*	**1,732**	*in PPM*	**1,729**
Equivalent NaCl Concentration	*in Mg/L*	**1,347**	*in PPM*	**1,345**

Scaling Tendencies

Calcium Carbonate Index* **7,183

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

Calcium Sulfate (Gyp) Index* **61,640

Below 500,000 Remote / 500,000 - 10,000,00 Possible / Above 10,000,000 Probable

****This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.***

Remarks

Report # 3162

Maiorino, Brian D

From: bookkeeping [bookkeeping@hobbsnews.com]
Sent: Monday, December 19, 2011 1:46 PM
To: Maiorino, Brian D
Subject: [EXTERNAL]Re: Legal notice and affidavit #2

Your ad has been placed to publish on the 22nd of December.

Thank you,

Yesenia

On Dec 16, 2011, at 9:05 AM, classifieds wrote:

Begin forwarded message:

From: "Maiorino, Brian D" <Brian.D.Maiorino@conocophillips.com>
Date: December 16, 2011 10:00:14 AM MST
To: "classifieds@hobbsnews.com" <classifieds@hobbsnews.com>
Subject: Legal notice and affidavit #2

ConocoPhillips Company PO Box 51810, Midland, TX 79710-1810, Contact: Brian Maiorino (432) 688-6913, is seeking administrative approval from the New Mexico Oil Conservation Division to dispose of salt water into one well on the Wilder lease, in the Bell Canyon pool.

Wilder Federal 29 #1SWD, 2010 FNL 2560 FWL Sec 29 Township 26S Range 32E, Lea County, NM. Injection Interval 5765'-5920'

The maximum injection rate will be 10,000 barrels of water per day and the maximum injection pressure will be 1,153 psi. Interested parties must file objections or request for hearing with the New Mexico Oil conservation Division, 1220 South Saint Francis Drive, Santa Fe NM 87504 within 15 days of this notice.

Brian D Maiorino
Regulatory Specialist
ConocoPhillips Company
432.688.6913
brian.d.maiorino@conocophillips.com

Jenna Arther
Classifieds
575-391-5414- Direct
575-397-0610 -Fax
classifieds@hobbsnews.com

Proof of Notice

I hereby certify that a complete copy of this application was sent by certified mail to the listed persons below on December 19, 2011

Offset Operator

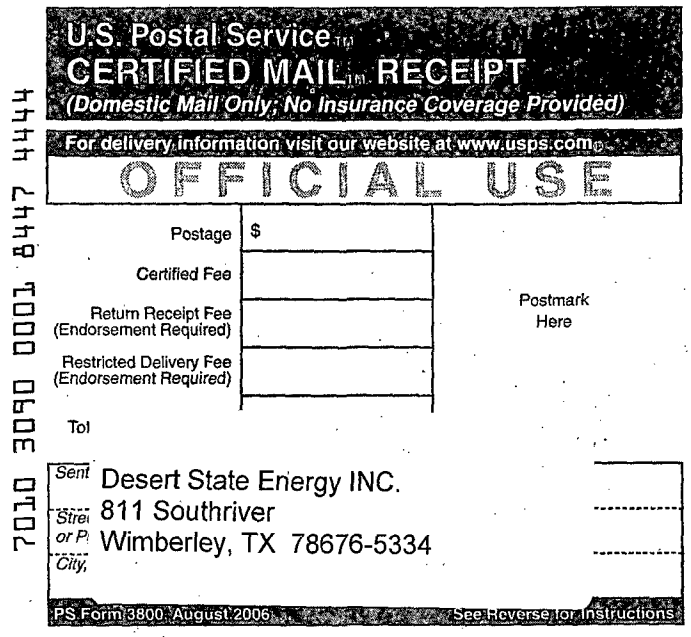
Desert State Energy
811 Southriver
Wimberley, TX 78676

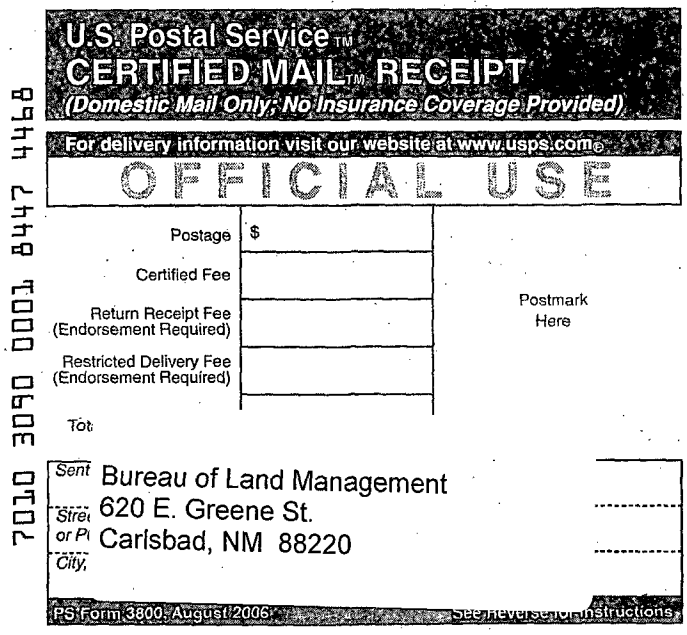
Surface Owner

Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220

B. Maiorino 12/19/11

Brian Maiorino
ConocoPhillips Company
Regulatory Specialist





To: Jones, William V., EMNRD
Subject: RE: Disposal applications from ConocoPhillips Company: Sections 29 and 17 of T26S, R32E, Lea County

Hi William, here is the needed lease map for the Wilder Federal 29 #1SWD. I am working on getting one for the Buck 17 #1SWD. Please let me know if anything else is needed.

Thanks for your help!

Brian D Maiorino
Regulatory Specialist
ConocoPhillips Company
432.688.6913
brian.d.maiorino@conocophillips.com

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Tuesday, December 27, 2011 5:03 PM
To: Maiorino, Brian D
Cc: Brooks, David K., EMNRD
Subject: [EXTERNAL]Disposal applications from ConocoPhillips Company: Sections 29 and 17 of T26S, R32E, Lea County

Hello Brian,
Just glanced over these applications and see that we need a description of each separately owned tract of land within or partially within the ½ mile Area's of Review.
I am attaching one example of how to do this. In this example, the tracts are shown on a map and the owners (lessees of each tract are identified).
The notifications should go out to whomever controls any separately owned tract of land – this is normally the Lessees. If any tract is not leased in the depths you intend to dispose of water, then provide notice to the mineral/royalty owner or owners of that tract.

You should pass this request to your landman?

Hope your holidays are going well.
Regards,

William V Jones, P.E.
Engineering, Oil Conservation Division
1220 South St. Francis Drive, Santa Fe, NM 87505
Tel 505.476.3448 ~ Fax 505.476.3462

Jones, William V., EMNRD

From: Maiorino, Brian D [Brian.D.Maiorino@conocophillips.com]
Sent: Monday, January 09, 2012 2:11 PM
To: Jones, William V., EMNRD
Subject: RE: Disposal applications from ConocoPhillips Company: Sections 29 and 17 of T26S, R32E, Lea County

Yes, ConocoPhillips has 100% working interest in the yellow acreage from the base of the Delaware to basement.

Brian D Maiorino
Regulatory Specialist
ConocoPhillips Company
432.688.6913
brian.d.maiorino@conocophillips.com

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Monday, January 09, 2012 10:12 AM
To: Maiorino, Brian D
Subject: [EXTERNAL]RE: Disposal applications from ConocoPhillips Company: Sections 29 and 17 of T26S, R32E, Lea County

Hello Brian,
Thanks for this.
The map shows COP lease coverage – does that mean COP has 100% Working Interest in that yellow acreage?
Also, let me know if these leases within the ½ mile Area of Review are "all depths" or not.

Thank You,

Will Jones
New Mexico
Oil Conservation Division
Images Contacts

From: Maiorino, Brian D [mailto:Brian.D.Maiorino@conocophillips.com]
Sent: Monday, January 09, 2012 7:34 AM

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Thursday, January 26, 2012 11:14 AM
To: 'Maiorino, Brian D'
Cc: 'Wesley_Ingram@blm.gov'; Kautz, Paul, EMNRD
Subject: Disposal application from ConocoPhillips Company: Wilder Federal 29 #1 30-025-NA Delaware from 5765 to 5920 feet, Lea County

Hello Brian,
Just reviewed the application on this proposed well,

a. Please send a wellbore diagram showing the well as it will be equipped for disposal.
b. I looked at some surrounding logs, especially to the west of here. It seems the Delaware may drop off deeper in this Section? Do you guys have a structure map?
c. Would you please ask your geologist to pick (or estimate) some tops for me?
    a. Top of Delaware
    b. Top of Bell Canyon, Cherry Canyon and Brushy Canyon if possible.
d. For fresh water in this area, what is the name of the formation and depth to top and bottom of fresh water?
e. We have no well file on this proposed well yet – and no API number because you guys are likely applying to the BLM. The disposal permits are specific to one location, and if you move the location we have to relook at everything. How sure are you the footages sent with this application will be the final ones? If not sure, when will you know?
f. Identify separately owned tracts – as the previous email sent today...

Thanks for this,

Will Jones
New Mexico
Oil Conservation Division
Images Contacts

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Thursday, January 26, 2012 11:03 AM
To: 'Maiorino, Brian D'
Subject: RE: Disposal applications from ConocoPhillips Company: Sections 29 and 17 of T26S, R32E, Lea County

Brian,
On these two maps you sent, could you quickly outline the separate "leases" that exist within the ½ mile AOR's and resend the map?
The yellow acreage may be all ConocoPhillips, but looks like there may be separate leases and I can't tell because it's all yellow.

Also you said that ConocoPhillips owns everything from the base of the Delaware to basement – don't you mean from the "TOP" of the Delaware to basement?

Will Jones
New Mexico
Oil Conservation Division
Images Contacts

Images Contacts

From: Maiorino, Brian D [mailto:Brian.D.Maiorino@conocophillips.com]
Sent: Tuesday, January 31, 2012 1:53 PM
To: Jones, William V., EMNRD
Cc: Wesley_Ingram@blm.gov; Kautz, Paul, EMNRD
Subject: RE: Disposal application from ConocoPhillips Company: Wilder Federal 29 #1 30-025-NA Delaware from 5765 to 5920 feet, Lea County

Here are the requested maps with the leases outlined. I am working with the team to get the other info needed. The footages given will be the final location. Yes, we are applying to drill this well with the BLM so we don't have an API #. However, the BLM will not approve their APD until the permit to inject has been approved. Will get the rest of the info to you as soon as I can. Please let me know if there is anything else needed.

Thanks for your help!

Brian D Maiorino
Regulatory Specialist
ConocoPhillips Company
432.688.6913
brian.d.maiorino@conocophillips.com

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Thursday, January 26, 2012 12:14 PM
To: Maiorino, Brian D
Cc: Wesley_Ingram@blm.gov; Kautz, Paul, EMNRD
Subject: [EXTERNAL]Disposal application from ConocoPhillips Company: Wilder Federal 29 #1 30-025-NA Delaware from 5765 to 5920 feet, Lea County

Hello Brian,
Just reviewed the application on this proposed well,

a. Please send a wellbore diagram showing the well as it will be equipped for disposal.
b. I looked at some surrounding logs, especially to the west of here. It seems the Delaware may drop off deeper in this Section? Do you guys have a structure map?
c. Would you please ask your geologist to pick (or estimate) some tops for me?
    a. Top of Delaware
    b. Top of Bell Canyon, Cherry Canyon and Brushy Canyon if possible.
d. For fresh water in this area, what is the name of the formation and depth to top and bottom of fresh water?
e. We have no well file on this proposed well yet – and no API number because you guys are likely applying to the BLM. The disposal permits are specific to one location, and if you move the location we have to relook at everything. How sure are you the footages sent with this application will be the final ones? If not sure, when will you know?
f. Identify separately owned tracts – as the previous email sent today...

Jones, William V., EMNRD

From: Maiorino, Brian D [Brian.D.Maiorino@conocophillips.com]
Sent: Thursday, February 02, 2012 4:38 PM
To: Jones, William V., EMNRD
Subject: RE: Disposal application from ConocoPhillips Company: Wilder Federal 29 #1 30-025-NA Delaware from 5765 to 5920 feet, Lea County

Sorry, I outlined the separate leases darker but must not have come out as clearly as I thought.

Yes, there are two leases the Wilder SWD that fall within the AOR. NM27508 and NMLC068281B.

The Buck has three leases that fall within the AOR. NMLC062749C, NMNM105560, and NMLC068281B

Brian D Maiorino
Regulatory Specialist
ConocoPhillips Company
432.688.6913
brian.d.maiorino@conocophillips.com

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Thursday, February 02, 2012 1:23 PM
To: Maiorino, Brian D
Subject: [EXTERNAL]RE: Disposal application from ConocoPhillips Company: Wilder Federal 29 #1 30-025-NA Delaware from 5765 to 5920 feet, Lea County

Hello Brian,
The separate tracts of land seem to all be colored "yellow" so it is hard to distinguish the separate leases.

To ensure I am reading these maps correctly,
For the Wilder application, are there only two leases (tracts) involved within ½ mile of that well?
How many separate leases (or tracts) are in or partially in the AOR surrounding the well for the other disposal application?

Will Jones
New Mexico
Oil Conservation Division

Jones, William V., EMNRD

From: Maiorino, Brian D [Brian.D.Maiorino@conocophillips.com]
Sent: Monday, February 06, 2012 11:58 AM
To: Jones, William V., EMNRD
Cc: Wesley_Ingram@blm.gov; Kautz, Paul, EMNRD
Subject: RE: Disposal application from ConocoPhillips Company: Buck Federal 17 #1 30-025-NA Delaware from 5745 to 5905 feet, Lea County
Attachments: Buck Federal 17 #1SWD wellbore diagram.xls; Wilder Federal 29 #1SWD wellbore diagram.xls

Will, I received this from geology today. Please let me know if there is anything else needed or if there are any other questions that need answered. I've also attached wellbore diagrams for each well as requested.

Please keep in mind that the Bell Canyon is consider the top of the Delaware in this area. Below are estimated tops in measured depth (MD) for the proposed SWD's.

- **Buck Federal 17 1SWD**:
  - Rustler _ 1025'
  - Delaware _ 4337'
  - Bell Canyon _ 4337'
  - Cherry Canyon _ 6139'
  - Brushy Canyon _ 7061'

- **Wilder Federal 29 1SWD**:
  - Rustler _ 935'
  - Delaware _ 4290'
  - Bell Canyon _ 4290'
  - Cherry Canyon _ 6022'
  - Brushy Canyon _ 6978'

The sediments above the the Rustler Formation (the Quaternary age sediments) are consider to contain freshwater. Therefore the range in depth of freshwater would generally be from surface to the top of the Rustler. The estimated MD of the Rustler top in each of the proposed SWD wells is shown above.

Thanks!

Injection Permit Checklist (11/15/2010)

WFX____ PMX____ SWD 1303 Permit Date 2/8/12 UIC Qtr (F I F M)

Wells 1 Well Name(s): WILDER FEDERAL 29 #2

API Num: 30-0 25- ____ Spud Date: NOT Yet New/Old: N (UIC primacy March 7, 1982)

TO BE DRILLED

Footages 2010 FNL/2560 FWL Unit F Sec 29 Tsp 26S Rge 32E County LEA

General Location: ± 2mi N of State Line, 15mi NE of Red Bluff Rest.

Operator: CONOCO PHILLIPS COMPANY Contact BRIAN MAIORINO

OGRID: 217817 RULE 5.9 Compliance (Wells) 2/4626 (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed __ Current Status: NOT DRILLED — NONE Yet

Planned Work to Well:

Diagrams: Before Conversion ____ After Conversion ✓ Elogs in Imaging File: NEW

Well Details:	Sizes Hole.....Pipe	Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method
New ✓ Existing __ **Surface**	12¼ 9⅝			280	CIRC
New __ Existing __ **Interm**					
New ✓ Existing __ **LongSt**	8¾ 7	6300' TD		540	Surf.
New __ Existing __ **Liner**					
New __ Existing __ **OpenHole**					

Depths/Formations:	Depths, Ft.	Formation	Tops?
Formation(s) Above	≈4300'	Bell Can.	✓
Injection TOP:	5765' TVD	Bell Can.	Max. PSI 1153 OpenHole __ Perfs ✓
Injection BOTTOM:	5920' TVD	~~Hoyle~~	Tubing Size 3½ Packer Depth 3,700'
Formation(s) Below	6022	Dewey L.	✓

~~Captan Reef?~~ __ ~~(Potash? __ Noticed? __)~~ ~~[WIPP? __ Noticed? __]~~ Salado Top/Bot 1280 — ~~Cliff House?~~ __

Fresh Water: Depths: <935' Formation Ogallala Rustler Wells? Yes Analysis? __ Affirmative Statement ✓

Disposal Fluid Analysis? ✓ Sources: AVALON/Del

Disposal Interval: Analysis? ✓ Production Potential/Testing: Wet on MUDLOG/LOSS + NO OTHER Producers

Notice: Newspaper Date 12/22/11 Surface Owner BLM (12/19/11) Mineral Owner(s) BLM

RULE 26.7(A) Affected Persons: Devon Stevens Energy

AOR: Maps? ✓ Well List? ✓ Producing in Interval? NO Wellbore Diagrams? —

.....Active Wells 0 Repairs? — WhichWells? —

.....P&A Wells 0 Repairs? — Which Wells? —

Issues: Request Sent ____ Reply: ____