Side 1

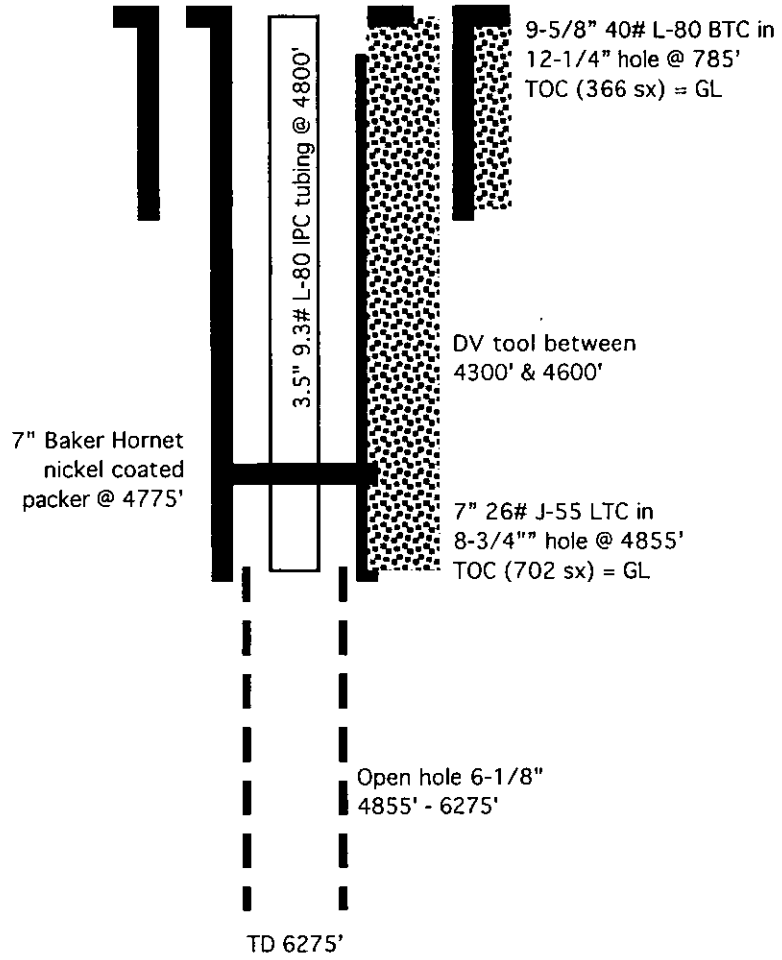
INJECTION WELL DATA SHEET

OPERATOR: CONOCOPHILLIPSCOMPANY

WELL NAME & NUMBER: RED HILLS WEST 16 STATE SWD 1

WELL LOCATION:	1226 FNL & 893 FWL	D	16	26 S	32 E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



(not to scale)

WELL CONSTRUCTION DATA

Surface Casing

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

Cemented with: 366 sx. *or* 555 ft^3

Top of Cement: SURFACE Method Determined: CIRCULATE

Intermediate Casing

Hole Size: 8-3/4" Casing Size: 7"

Cemented with: 702 sx. *or* 1,573 ft^3

Top of Cement: SURFACE Method Determined: CIRCULATE

Production Casing (none - open hole)

Hole Size: 6-1/8" Casing Size: N/A

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

Top of Cement: _____ Method Determined: _____

Total Depth: 6,275'

Injection Interval

4,855' feet to 6,275'

(~~Perforated~~ or Open Hole; indicate which)

ConocoPhillips Company
Red Hills West 16 State SWD 1
1226' FNL & 893' FWL Sec. 16, T. 26 S., R. 32 E.
Lea County, New Mexico

I. Goal is to drill a 6275' deep saltwater disposal well. Disposal interval will be 4855' - 6275' in the SWD; Delaware (96100).

II. Operator: ConocoPhillips Company (OGRID: 217817)
Operator phone number: (281) 206-5282 (Kristina Mickens)
Operator address: 600 North Dairy Ashford Road, Houston TX 77079

Contact for Application: Brian Wood (Permits West, Inc.)
Phone: (505) 466-8120

III. A. (1) Lease: NM State Land Office lease LG-3620-0000
Lease Size: 640 acres (see Exhibit A for map and C-102)
Closest Lease Line: 893'
Lease Area: all Sec. 16, T. 26 S., R. 32 E.

A. (2) Surface casing (9-5/8", 40#, L-80, BTC) will be set at 785' (70' into the Rustler) in a 12-1/4" hole and cemented to the surface with 366 sacks (555 cubic feet) Class C. Lead with 194 sacks (x 1.68 $feet^3$/sack = 326 cubic feet) mixed at 13.7#. Tail with 172 sacks (x 1.33 $feet^3$/sack = 229 cubic feet) mixed at 14.8#. Excess = 125%

Production casing (7", 26#, J-55, LTC) will be set at 4855' (325' into the Olds sand) in an 8-3/4" hole and cemented to the surface with 702 sacks (1573 cubic feet) Class C. A DV tool will be set between 4300' and 4600' depending on drilling conditions. Lead with 535 sacks (x 2.52 $feet^3$/sack = 1348 cubic feet) mixed at 11.9#. Tail with 167 sacks (x 1.35 $feet^3$/sack = 225 cubic feet) mixed at 14.8#.

A 6-1/8" open hole will be drilled to a TD of 6275' (886' into the Cherry Canyon and 632' above the Brushy Canyon).

A. (3) Tubing will be 3.5", 9.3#, L-80, IPC. Setting depth will be ≈4800'. (Disposal interval will be 4855' to 6275'.)

A. (4) A Baker Hornet nickel-coated packer will be set at ≈4775'. That is 80' above the top (4855') of the open hole disposal interval.

B. (1) Disposal zone will be the SWD; Delaware (96100).

B. (2) Disposal interval will be 4855' to 6275'.

B. (3) The well will be drilled as a disposal well.

B. (4) The well has not been previously perforated. (No spud yet.)

B. (5) Bottom (4585') of the closest producing zone above the disposal zone is ≥270' above the top (4855') of the open hole. That producing zone is the Olds sand and is part of the upper Bell Canyon. Four continuous shale stringers separate the 2 zones. Top (8250') of the closest producing zone (Bone Spring) below the disposal zone is ≥1975' below the open hole TD (6275'). See Exhibit B for more detail on the geologic analysis.

IV. This is not an expansion of an existing injection project. It is disposal only.

V. Exhibit C shows the 17 existing wells (1 SWD + 4 P&A + 12 oil) within a half-mile radius. Exhibit D shows all 106 existing wells (75 oil or gas wells + 22 P & A wells + 4 disposal + 4 water supply + 1 monitor) within a two-mile radius.

Exhibit E shows all leases and lessors (only BLM and State) within a half-mile radius. Exhibit F shows all leases and lessors (State and BLM) within a two-mile radius. Details on the leases within a half-mile radius are:

5. See Exhibit H for analyses of Bell Canyon, Cherry Canyon, and Delaware water.

VIII. *The Delaware (≥3,783' thick in this well) is composed of numerous non-*productive sandstones with good porosity and permeability and is inter-bedded with numerous thin shale zones and tight carbonates stringers that are all very continuous across in the area. There is a 3,702' interval of salt and anhydrites above the top of the Delaware.

Closest possible underground source of drinking water above the proposed disposal interval is the Quaternary at the surface. There are 3 existing water wells within a 2-mile (3220 meter) radius according to State records (Exhibit I). No additional water wells were found during a field inspection on July 30, 2014. Closest of the trio is 7,560' southeast. Deepest of the trio is 405' deep. Depth to water ranges from 125' to 405'. A deeper (850') well has been approved, but not yet drilled. No underground source of drinking water is below the proposed disposal interval.

Formation tops are:

Quaternary = 0'
Rustler Anhydrite = 715'
Salado Salt & Anhydrite = 1072'
Castile Anhydrite = 2645'
Delaware Mountain Group (Bell Canyon) = 4417'
Ramsey = 4446'
Ford Shale = 4524'
Olds Sand = 4530'
Cherry Canyon = 5389'
TD = 6275'
(Brushy Canyon = 6907')
(Bone Spring = 8250')

There will be ≥3,702' of vertical separation and salt and anhydrite intervals between the bottom of the only likely underground water source (Quaternary) and

Red Hills West 16 State SWD 1
1226' FNL & 893'FWL
Section 16, T. 26 S., R. 32E.
Lea County, NM

Geologic Summary:

The proposed SWD well is designed for disposal into the Delaware Mountain Group. Attached is a cross-section which tracks from west to east showing the major geologic formations of the Delaware Mountain Group (Bell Canyon, Cherry Canyon and Brushy Canyon Formations). This geologic evaluation includes all of the Delaware Mountain Group in T. 26 S., R. 32 E. It is comprised of numerous non-productive sandstones with good porosity and permeability and is inter-bedded with numerous thin shale zones and tight carbonates stringers that are all very continuous across in the area.

The sand members of the Bell Canyon, known as the Ramsey and Olds sandstone, are identified on the attached cross-section. They are the only zones within the Delaware Mountain Group that have been found productive in this township. The Ramsey and Olds are located within the top 200' of the Bell Canyon at a measured depth (MD) from 4468' to 4574' as shown in Mewbourne's Red Hills West 8 Federal 1H. This well is located in Section 8, T. 26 S., R. 32E., 2021' northwest of the proposed SWD well.

Two low rate producers from the upper Bell Canyon (Ohio State 1 (30-025-27525) and Ohio State 2 (30-025-27526)) are 693' northwest and 784' southwest respectively from the proposed SWD well. A slight gas show with slight cut and fluorescence was noted in Mewbourne's Red Hills West 8 Federal 1H mud log when the Ramsey and Olds Formations were penetrated. However, water saturation calculations from well logs across this interval in the Red Hills West 8 Federal 1H indicate that all intervals within the Delaware Mountain Group (including the Ramsey and Olds sandstones) are wet and non-productive.

The top of the interval identified for water disposal in the Red Hills West 16 State SWD 1 occurs from ≈4855' (270' below the base of the Olds Formation) to ≈6275' (886' into the Cherry Canyon). This interval is identified in the Red Hills West 8 Federal 1H and is noted on the cross section. With the disposal interval being at least 270' vertically below the base of the only potentially productive interval in the township, and with the existence of 4 continuous shale stringers within this 270' interval, the proposed disposal interval should have no potential for oil or gas production at the proposed location. It will be a good interval for saltwater disposal.

There are no fresh water wells within one mile of the subject proposed SWD well.

Harvey O. Vick III Office: (281) 206-5486 Mobile: (832) 330-0392
Geologist, ConocoPhillips

EXHIBIT B

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

October 30, 2014

Phil Goetze
NM Oil Conservation Div.
1220 S. St. Francis Dr.
Santa Fe NM 87504

Dear Phil,

Mewbourne filed an objection dated October 17 to ConocoPhillips' proposed Red Hills West 16 State SWD 1 (30-025-42174; D-16-26s-32e, Lea County). After a discussion with Mewbourne, ConocoPhillips has modified its proposal in accordance with Mewbourne's wishes (see attached October 29 letter).

The original TD was 7400' (in the Brushy Canyon). The revised TD will be 6275' (in the Cherry Canon). See the 6 attached revised pages.

Please call me if you have any questions.

Sincerely,

Brian Wood

cc: Mickens
Bruce