

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

February 28, 2017

Michael McMillan  
NM Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe NM 87505

Dear Michael,

On behalf of Legacy Reserves Operating, LP (240974), I am requesting 2 minor modifications of SWD-652 for Legacy's Barnes 20 SWD 1 (30-025-31601). The well in C-20-9S-35e disposes into the SWD; Bough C (96097) from 9740' to 9754' (see attached well bore diagram).

Maralo's 1996 SWD application stated the source water would be "produced water from the Devonian". Legacy would like to also take produced water from the San Andres. Anticipated ratio is 80% San Andres and 20% Devonian.

Legacy analyzed (attached) Devonian and San Andres water from two nearby wells and believes the waters are compatible. The Devonian sample came from the Bonds 1 (30-025-25275), which is 2887' southeast of the Barnes 20 SWD 1. The San Andres sample came from the Vince BGH 1 (30-025-37104), which is 8756' southwest of the Barnes 20 SWD 1.

Maralo's 1996 application stated the maximum bwpd would be 2,000. Legacy would like to increase the maximum to 4,000 bwpd. The 2016 average was 439 bwpd. January 23, 2017 step rate test results are attached. — *NOT PROPOSED*

Please call or e-mail ([brian@permitswest.com](mailto:brian@permitswest.com)) if you have any questions.

Sincerely,

*Brian Wood*

Brian Wood

*THEY MAY RE-RUN S.R.T.*



## Barnes 20 SWD #1

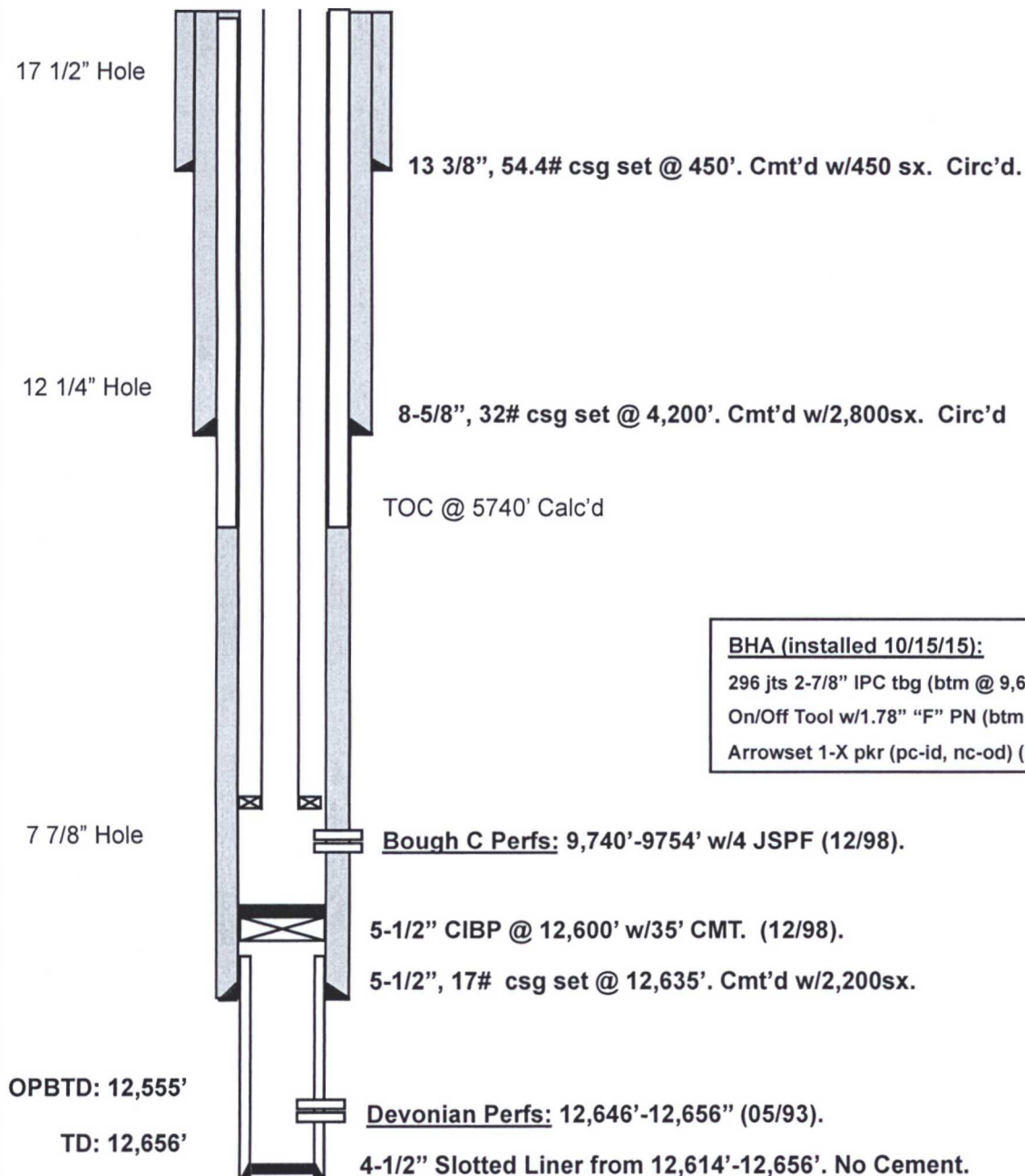
Current Wellbore

LOCATION: 766' FNL & 2201' FWL, Sec 20, T9S, R35E

FIELD: JENKINS  
COUNTY: Lea  
STATE: New Mexico

GL: 4170'  
KB:  
SPUD DATE: 06/06/1992

LATEST UPDATE: 01/16/2017  
BY: CSPARKMAN  
API No:  
30-025-31601



### BHA (installed 10/15/15):

296 jts 2-7/8" IPC tbg (btm @ 9,664')

On/Off Tool w/1.78" "F" PN (btm @ 9,665')

Arrowset 1-X pkr (pc-id, nc-od) (btm @ 9,673')