

RWSU Monitor wells.

Chevron has many idle wellbores that will be useful to future operations and development opportunities. Our objective is to secure the wellbores to ensure the Weber Formation fluids and pressures are contained and to prevent loss of fluids into the shallower formations. Chevron would like to use some of these TA wellbores as monitor wells. These are the steps:

- Secure the well:
 1. Install an isolation packer as close to the top perforation as possible.
 2. Circulate a packer fluid with Corrosion Inhibitor, Biocide & Oxygen Scavenger into the tubing / casing annulus.
 3. Perform a mechanical integrity test (MIT) on the tubing / casing Annulus at 300 psi for 15 minutes with maximum 10% pressure change.
 4. Install retrievable plug in the tubing near the isolation packer.

- Monitoring:
 1. Complete an MIT on a 5 years interval thereafter.
 2. Pull the tubing plug and record a static bottom hole pressure (BHP) every 2 years.
 3. This minimizes shutting in active injection wells to secure BHPs

- Change of Well status and return to service:
 1. When the well is returned to service an MIT will be performed and the appropriate reporting will be submitted:
 2. MIT for producing wells: ESP, Rod & flowing wells at 300 psi for 15 minutes with less than 10% pressure change.
 3. MIT for injection wells: Pressure test at 2200 psi for 15 minutes with less than 10% pressure change and drop to 1200 psi for subsequent MITs.

Example Monitor Well

Rangely Weber Sand Unit

Well Details:	
STATE & CO	CO - Rio Blanco
TWNS & RNG	T2N & R102W
SECTION	(RENE) 21
API	05-103-0016000
CREVD	05470

Casing Details:	
Type	Depth
KB	5354
GL	5366
10 in. 55 #/ft. F-25	0 - 60' 75 sxs cmt
10 75 #/ft. 40 S #/ft. H-40	0 - 499' 225 sxs cmt
7 in. 23 #/ft. J-55	0 - 5607' sxs cmt
7 in. 23 #/ft. N-80	5607 - 6470' 1000 sxs cmt
Top perfs	
Bottom perfs	
P670	6470
TD	6470

Formation	Depth
Nevada	2469
Frontier	3402
Frontier Sand	3405
Mowry	3674
Dakota	3760
Montan	3850
Curtis	4580
Entrada	4660
Camel	4800
Navajo	4870
Chinle	5434
Shinarump	5572
Moenkopi	0
Weber	6317

GOC_CALC	5636
Weber 1a	6317
Weber 2	0
Weber 3a	0
Weber 4	0
Weber 5a	0
Weber 6	0
Weber 7a	0
Weber 8	0
Weber 8a	0
Weber 10	0
Weber 11a	0
OWC_CALC	6466

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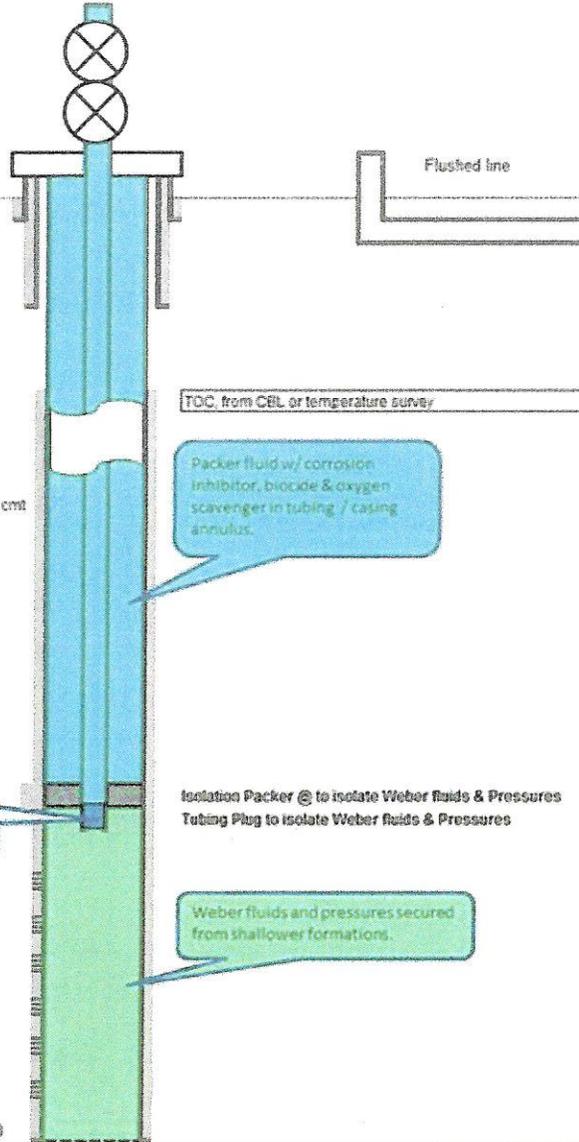
7 in. 23 #/ft. N-80
 5607 - 6470' 1000 sxs cmt

Retrievable tubing plug with Packer fluid in tubing.

Top perfs

Bottom perfs

TD 6470



TOC, from OIL or temperature survey

Packer fluid w/ corrosion inhibitor, biocide & oxygen scavenger in tubing / casing annulus.

Isolation Packer @ to isolate Weber fluids & Pressures
 Tubing Plug to isolate Weber fluids & Pressures

Weber fluids and pressures secured from shallower formations.