



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

**MINOR MODIFICATION TO PERMIT NO. R9UIC-CA1-FY17-3  
ISSUED TO MCKITTRICK LIMITED**

In accordance with 40 CFR §144.41(f), this Permit is hereby modified to reflect changes in well construction of McKittrick WD-1. Specifically, the modification revises the approved perforated injection intervals of the well and adds the new 5-1/2 inch casing to the well.

Portions of pages 5 and 8, and the entirety of Appendix B of the Permit are revised to incorporate the above changes and now read as follows (for clarity, changes on pages 5 and 8 of the Permit are shown below with removals struck out and new additions in **bold**):

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Part I. Authorization to Inject

This Permit authorizes injection by Well McKittrick WD-1, for disposal of specific types of waste waters from power plant operations, into the Stevens Sand within the McKittrick Oil Field at depths ranging between ~~3,010-3,455~~ and ~~3,180-3,573~~ feet, **and between 3,250 and 3,390 feet** below ground surface. The Stevens Sand at Well McKittrick WD-1 has greater than 10,000 mg/L total dissolved solids and is confined above by the approximately 350-foot thick shale of the Antelope Member of the Monterey Formation and below by the approximately 200-foot thick shale of the McDonald Member of the Monterey Formation.

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5. Injection Interval

Well McKittrick WD-1 is currently injecting into the Stevens Sand within the McKittrick Oil Field. The Stevens Sand at Well McKittrick WD-1 has greater than 10,000 mg/L total dissolved solids. Injection by Well McKittrick WD-1 is only permitted into the Stevens Sand, within the depth range as depicted in the well schematic in Appendix B (i.e., at depths ranging between ~~3,010-3,455~~ and ~~3,180-3,573~~ feet, **and between 3,250 and 3,390 feet** below ground surface).

Appendix B (Current Well Schematic)

**McKittrick Limited**

WD1; API # 029-87661  
 Section 13, T30S, R21E M.D.B.&M.

ELEVATION:

KB 1123.5'

DATUM:

KB 10' above ground surface

TD:

OH: 3944'

PBTD:

3400'

BFW:

No USDW

SPUD DATE:

06/03/1991

COMPLETION DATE:

06/16/1991

WELL STATUS:

Active

DIRECTIONALLY DRILLED:

No

JUNK:

None

PLUGS:

3992-3400'

CASING:

10.75" csg @ 511' w/290 sx cmt, cmt to surface  
 7" csg @ 3943' w/1038 sx cmt, cmt to surface  
 5.5" csg @ 3400' w/cmt to surface

TUBULARS

2 7/8" 0-2911'

Packer @ 2910'

PERFORATIONS:

3390-3250', 3180-3010" active  
 3458-3873' isolated with cement

HOLE SIZE:

0' - 511': 14.75"

511' - 3944': 9-7/8"

MARKERS:

Alluvium: 0'

Tulare: 260'

San Joaquin: 765'

Top Olig: 1022'

Base Olig: 1696'

Top Stevens: 2158'

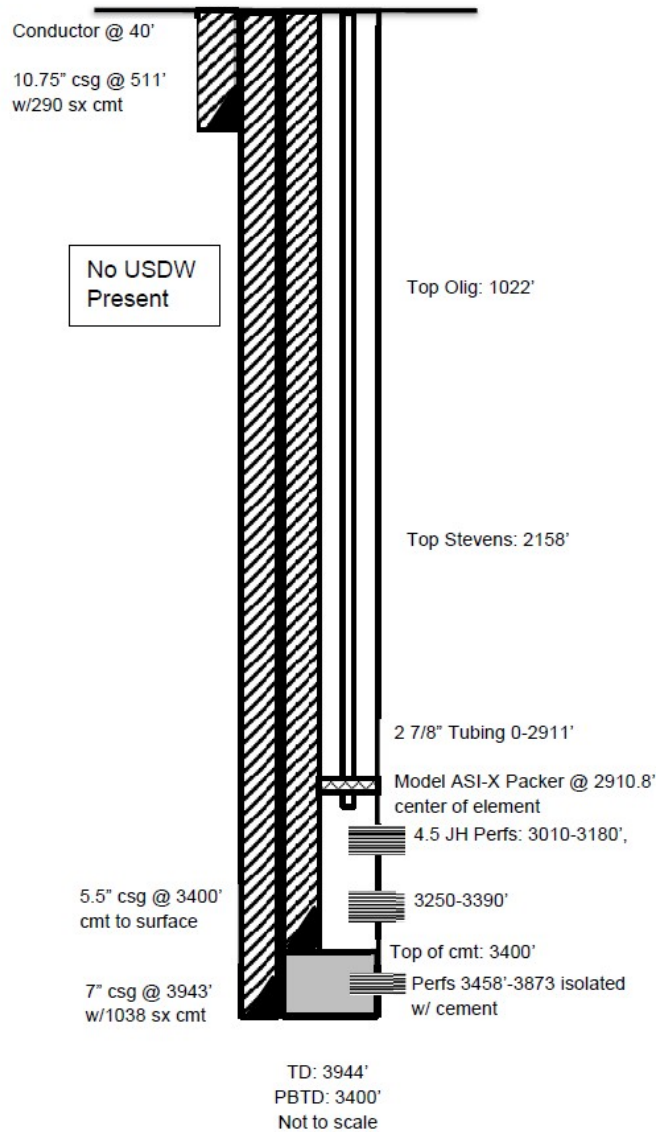
Base Stevens: 3876'

**EnviroTech**  
 Consultants, Inc.

INITIAL & DATE:

JLP - 3/26/2020

LAK - 8/04/2020



All other permit conditions remain unchanged.

This minor modification is issued and becomes effective on:

October 15, 2020

**TOMAS  
TORRES**

Digitally signed by  
TOMAS TORRES  
Date: 2020.10.15  
11:18:08 -07'00'

Tomás Torres  
Director, Water Division