# WELL DATA REPORT FOR INDUSTRIAL AND MUNICIPAL INJECTION WELLS

Texas Commission on Environmental Quality

Radioactive Materials Division

Underground Injection Control Permits Team, Mail Code 233

P.O. Box 13087

Austin, Texas 78711-3087

Operating company name and address:

Telephone:

Contact person:

1. General Identification Data
2. Permit number: WDW
3. Plant well number:
4. Geographical coordinates of injection well:

Latitude      deg      min      sec North

Longitude      deg      min      sec West

1. Well location (legal description):
2. County:
3. Location to nearest town:
4. General Data on Well Site
5. Generalized description of waste stream injected (attach complete chemical analysis to this form):
6. Date well permitted (month/day/year):
7. Date well put in service (month/day/year):
8. Maximum permitted injection rate (gallons/minute):
9. Maximum permitted injection volume (gallons/month or gallons/year):
10. Average permitted injection rate (gallons/minute):
11. Average permitted injection volume (gallons/month or gallons/year):
12. Maximum permitted surface injection pressure (psig):
13. operating parameters and special provisions not covered above and show calculation of List other pertinent maximum surface injection pressure:
14. Total depth of well:
15. Name and depth of injection zone:
16. Elevation of well (KB or GL):
17. KB-to-ground level:
18. Geological Information
19. Lithology and Stratigraphy
20. Geological description of rock units penetrated by well bore:

| Name | Age | Depth | Thickness | TDS (avg) |
| --- | --- | --- | --- | --- |
|       |       |       |       |       |

Table : Geological Description of Rock Units

1. Description of injection unit (injection zone):
2. Name(s):
3. Depth drilled:
4. Thickness (total/net):
5. Lithostatic pressure gradient (psig) (Use 1.0 psi/ft unless justified otherwise.)
6. Fracture pressure (psig) (State how derived.):
7. Average porosity and source:
8. Permeability (md) and source:
9. Bottom hole temperature:
10. Lithology:
11. BHP (original @ datum) (psig):
12. BHP (present @ datum) (psig):
13. Datum level KB      , GL      , MSL

\*24 Hour shut-in pressure unless notified otherwise.

1. Chemical characteristics of formation fluid. Attach complete chemical analysis if available:
2. Description of hydrology of fresh water and other potentially beneficial aquifers:
3. Depth to base of usable quality water (3,000 mg/l TDS):
4. Depth to base of usable quality water (10,000 mg/l TDS):
5. Geologic description of aquifer units:

Table : Geologic Description of Aquifer Units

| Name | Age (optional) | Depth (ft KB) | Thickness (ft) | Lithology | TDS (avg) (If available) |
| --- | --- | --- | --- | --- | --- |
|       |       |       |       |       |       |

1. Waste Characteristics
2. Number of waste streams to form composite injection stream:
3. Plant products manufactured and process or operation which resulted in waste being injected:
4. Physical/chemical description (from complete chemical analysis attachment):
5. TDS:
6. Specific Gravity:
7. pH:
8. Temperature:
9. Pre-injection waste treatment description:
10. Well Design and Construction
11. Casing and tubing

| Casing and tubing | Size, weight, grade | Depth-GL |
| --- | --- | --- |
| Surface casing |       |       |
| Intermediate casing |       |       |
| Long string casing |       |       |
| Injection tubing |       |       |

Table : Casing and Tubing

1. Cement Data

| Cement data |  | Type/class | Additives | Amount | Circulate |
| --- | --- | --- | --- | --- | --- |
| Surface Casing |  |       |       |       |       |
| Long string Casing | First stage |       |       |       |       |
|  | Second stage |       |       |       |       |
|  | Third stage |       |       |       |       |
| Other |  |       |       |       |       |

Table : Cement Data

DV tool (stage cementing) setting depth (if applicable):

1. Packer
2. Type:
3. Name and model number:
4. Setting depth:
5. Type annular fluid used:
6. Bottom hole completion:
7. Well stimulation programs (last 5 years):
8. Description of surface equipment
9. Brief description of holding tanks and flow lines:
10. Brief description of pond(s) lining material, monitor system, minimum freeboard, etc.
11. Filters
12. Type:
13. Name and model:
14. Capacity:
15. Injection pumps
16. Type:
17. Name and model:
18. Capacity:
19. Monitoring Systems
20. Injection pressure gauges (non-recording):
21. Location:
22. Name & Model:
23. Injection pressure recording meters:
24. Location:
25. Name & Model:
26. Mechanical:
27. Electrical:
28. Casing-tubing annulus pressure gauges (non-recording):
29. Location:
30. Name & Model:
31. Casing-tubing annulus recording meters:
32. Location:
33. Name & Model:
34. Mechanical:
35. Electrical:
36. Injection rate meters (non-recording):
37. Location:
38. Name & Model:
39. Mechanical:
40. Electrical:
41. Injection rate meters (continuous recording):
42. Location:
43. Name & Model:
44. Mechanical:
45. Electrical:
46. pH recording devices:
47. Location:
48. Name & Model:
49. Mechanical:
50. Electrical:
51. Temperature:
52. Location:
53. Name & Model:
54. Mechanical:
55. Electrical:
56. Sampling procedure frequency and water quality parameter measured:
57. Frequency of measuring reservoir pressure:
58. Contingency plan for well failure during operation:
59. Logging Program (Open Hole) – Originals

| Surface TD | Long String/Open Hole TD |
| --- | --- |
|       |       |

Table : Logging Program

1. Well Malfunctions

Chronological listing of all major workovers and well malfunctions and brief description of reasons for the well failure over the past five years:

1. Diagrammatic sketch of injection well showing casing, cement, tubing, packer, etc., with proper setting depths. Sketch should include wellhead and gauges. An 8 X 11 inch sketch is preferred.
2. Re-permitting Only
3. Maps
4. Number of wells within 2 miles within 300 feet of the uppermost permitted injection interval, and all wells within a -mile radius of the injection well:       Date reviewed
5. Number of above wells that are plugged and abandoned:
6. Number of wells inadequately plugged and abandoned or on which records are incomplete. (Include available records):
7. Number of above wells that are still producing:
8. Number of water wells within 2 miles:
9. Plugging and abandonment plans:
10. Pressure simulation covering a period from beginning of operation through the next ten (10) years:
11. New artificial penetrations
12. Provide a tabulation of data on all penetrations required under XI.A.1. above of operator; lease or owner; distance from injection well; well number; casing size; setting depth and cementing data for surface, intermediate and long string casings; and plugging data for the abandoned wells. In addition to this information, copies of available casing and cementing records for those wells shown on the map in item XI.A.1. which penetrate to within 300 feet of the uppermost permitted injection interval and all wells within a -mile radius of the injection well shall be submitted with appropriate Railroad Commission cementing affidavits. Tabulation shall be keyed to map in XI.A.1. above.
13. Provide a schematic sketch of all penetrations requested under XI.D. above on Form TDWR-0023A (attached).