

WELL SUMMARY

page 1 of 3Location ID: ST-4-481 Field Representative(s): M. Canavan, D. MenzieDate Started: 04/08/92 Date Completed: 04/23/92Northing: 232154.39 Easting: 400492.51Brass Cap: 4493.16' Outer Casing: 4494.38' Inner Casing: 4494.88'Drilling Method: Mud/Air Foam Rotary Drilling Contractor: Larjon Drilling Co.Driller: J. GowerTotal Depth Borehole: 510' Total Depth Well Casing: 496.70'Total Depth Surface Casing: 85'Diameter Well Casing: 4" Diameter Surface Casing: 10"Length of Bottom Blank: 5.92'Type of Screen: extra strength 0.02 slotScreen Interval: 480.78' to 490.78'Water First Detected: 470' Water Level Open Borehole: 423.13' (T.O.S.C.)
(04/16/92)Water Level Cased Borehole: 425.24' (T.O.C.) (04/20/92)Quik-Foam Use: 3.5 gallons

Estimated Water Use: 8,200 gallons

Well Casing:

4in x 3ft SCD 40 PVC:

4in x 5ft SCD 40 PVC:

4in x 10ft SCD 40 PVC:

4in x 20ft SCD 40 PVC:

Total SCD 40 PVC pipe:

custom SS centralizers: 1 set

4"x2' SS locking riser: 1.97'

4" SS locking cap: 1

4" SS female cap: .28'

4 adaptors: 1.75'

1 extra strength screen: 10.00'

4in x 3ft SCD 5 SS pipe:

4in x 5ft SCD 5 SS pipe:

4in x 10ft SCD 5 SS pipe:

4in x 20ft SCD 5 SS pipe: 399.95'

Total SCD 5 SS pipe: 399.95'

4in x 5ft SCD 10 SS pipe: 5.02'

4in x 10ft SCD 10 SS pipe: 80.08'

4in x 20ft SCD 10 SS pipe:

Total SCD 10 SS pipe: 85.10'

Well Completion:

100# bags 16/40 sand: 3 bags
 100# bags 8/20 sand: 9 bags
 100# bags #3 sand: 25.5 bags
 94# bags cement: 150 bags
 50# bentonite powder: 15 bags
 Benseal: 1 bags

Surface Casing:

94# bags cement: 60 bags
 50# bags bentonite powder: 6 bags

Pertinent Field Notes:

04/07/92 Mobilize mud rotary equipment to site. - Canavan
 04/08/92 Line pit, mix mud and spud. Drill to 55' with 12¼" mill tooth bit. - Canavan
 04/09/92 Drill 55'-85'. Ream 0'-85' to 16". - Canavan
 04/10/92 Installed 85' of 10" diameter surface casing and grouted into place. - Canavan
 04/13/92 Demobilized Frank's rig and mobilized BE to site. Drilled air/foam rotary. 9 7/8" bit 85'-103'. Canavan
 04/14/92 Drill 103'-435'. - Canavan
 04/15/92 Drill 435'-510'. Southwest Surveys ran full suite of geophysical logs. - Canavan
 04/16/92 Designed well. Moved casing to site, installed filler sand and pumped bottom plug. Ran screen and 15' of casing into surface casing. Hydraulic motor on pulling unit needs to be replaced before we can run any more casing. - Canavan
 04/17/92 Completed well casing installation, installed gravel pack and pumped top plug. Bottom of sump is at 496.70'; screened interval is 480.78'-490.78'. - Canavan
 04/20/92 Installed filler sand from 467.92' to 408.67'. Poured first load of grout (100 bags cement, 10 gel, 845 gallons water). - Canavan
 04/21/92 Poured second load of grout (50 cement, 5 gel, 422 gallons water). - Canavan

Pertinent Field Notes: (cont'd)

- 04/22/92 Bailed well 10 times; yielded \approx 55 gallons. Installed pump to 472'. Pumped well for development. 1,085 gallons pumped. Parameters stabilized quickly. Well is developed. - Canavan
- 04/23/92 Pull pump and turn well over to Lockheed for sampling. - Canavan
- 05/19/92 Post development water level is 425.27' (T.O.C.). Lockheed has poured pad and set barrier posts. - Canavan