Date : 4-26-89

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fo : State of New Mexico
Energy and Minerals Department
Uil Conservation Division
P.U. Box 2088

Sante Fe, New Mexico 8/501

Attn: David Catanach

Poed of 21.89

New Mexico Uil Conservation Department P.U. Box 1980 Hobbs, New Mexico 88341-1980 Attn: Jerry Sexton

From : Singo Operating Inc. P.O. Box 3531

Midland, Texas 79702

Re: West Dollarhide Queen Sand Unit Ammendment to Exhibit "A" for Approved C-108

We have recently been fortunate enough to secure financing to complete the drilling and deepening project in the subject field. This will enable us to place the field on full injection. The "Finacial Agency" that has recently agreed to supply us with the necessary funds to complete this project, has done so with the stipulation that we begin on June 1st, 1989.

In an effort to save money in completing this project we have taken another look at how we will go about drilling and deepening wells. We have found that it is considerably less expensive to deepen an existing well and convert it to injection, than it is to drill a new replacement well (and plug the existing well that it is replacing).

Of the wells appearing on the approved exhibit "A", we have drilled one of the new wells and completed it as an injection well (no. 111), and performed 12 of the deepenings:

Well No.s 8, 9, 13, 14, 18, 20, 24, 25, 33, 35, 36, 47.

All of these deepenings were successful. Originally we believed that the success ratio of deepenings would be low, so we only asked for approval on 22 wells. We now believe we can be successful on more of these deepenings.

With this in mind we have looked at the existing wells (that were going to be plugged and replaced with new wells), and have choose those wells that we believe we can successfully deepen and convert to injection. This would mean that fewer new wells would have to be drilled.

Because of these findings we wish to ammend Exhibit "A" of the approved C-108 (of April 4th, 1998). The original Exhibit "A" listed 22 wells that were to be deepened and converted to injection, and 30 wells that were to be drilled and completed as injection wells. We need to substitute 13 deepenings for 13 new wells. The total number of wells will be the same, and the approximate location and pattern is the same. Please see attached color coded map.

Please find below a list of the these "substitute" wells we will deepen and convert to injection, and the corresponding (new well) that will not be drilled (or the well it would replace on the original C-108 Exhibit "A").

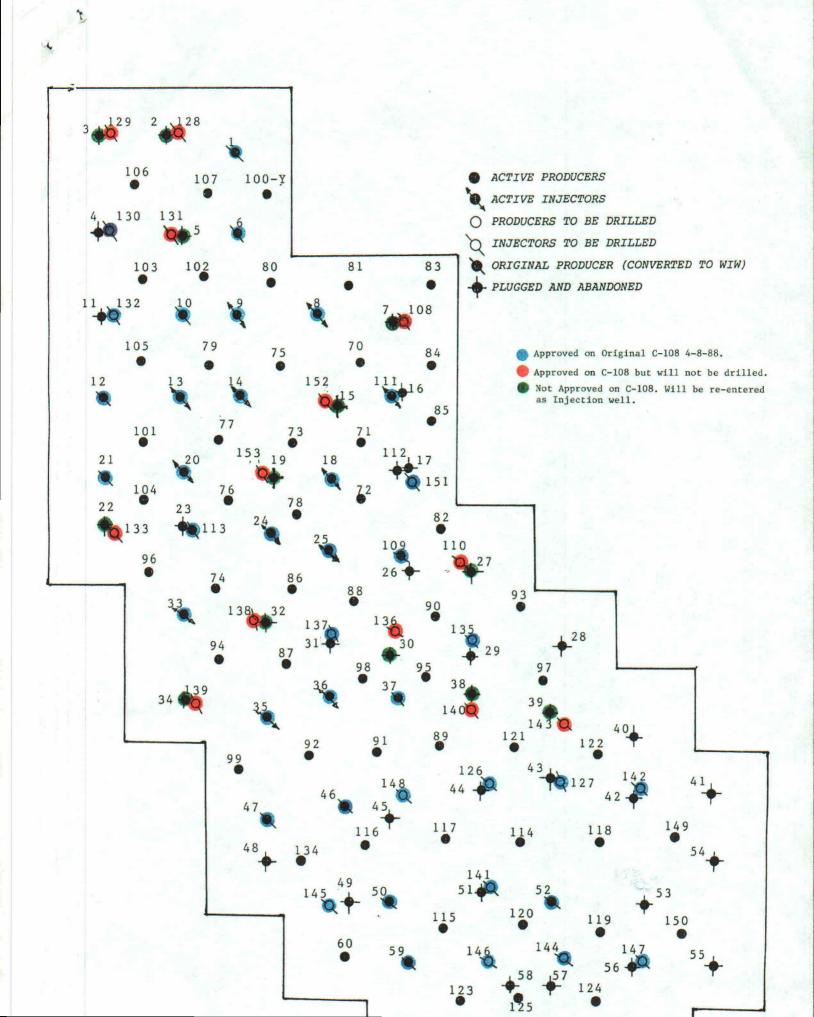
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Replacing
Well Description
     660' FSL 2310' FWL, Unit N, Sec 19, 7248, R38E.
                                                           128
ノ選集
/3 a
               990' FWL, Unit M, Sec 19, T245, R38E.
                                                           129
     660* FSL
     990' FNL 2310' FWL, Unit C. Sec 30.
                                           1248, R38E.
                                                           1.31
 7: 2310' FNL
               330' FWL, Unit E. Sec 29,
                                           T248, R38E.
                                                           108
1650' FSL
               510' FEL, Unit 1, Sec 30.
                                           T248. R38E.
                                                           152
19:
     330' FSL 1650' FEL, Unit O. Sec 30.
                                           T248, R38F.
                                                           153
222
     330" FNL
               990' FWL, Unit D, Sec 31.
                                           T248, R38E.
                                                           1.3.3
     990' FNL 1650' FWL, Unit C, Sec 32,
                                          TE4S, RBBE.
                                                           110
30: 2310' FNL
               330' FWL, Unit E, Sec 32,
                                           T245, R38E.
                                                           1.36
36: 1980' FNL 1650' FEL, Unit G. Sec 31,
                                           T245, R38E.
                                                           138
34: 2260' FSL 2309' FWL, Unit K, Sec 31.
                                          - f248. R38E.
                                                           1.39
36: 2310' FSL 1650' FWL, Unit K, Sec 32, 1249, R38E.
                                                           140
39: 1980' FSL 2310' FEL, Unit J, Sec 32, 1245, R38E.
                                                           143
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Also find attached a "current and proposed wellbore diagram" for each of the wells listed above.

Because I am under serious time constraints, please address this matter as soon as possible. I am ready and willing to help you in any way to attain approval before June 1st, 1989 so that my relationship with the "Financial Agency" is not geopordized.

Please call me if you need any additional information. Thank You.

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West Dollarhide Gueen Sand Unit Well No. 2 Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pick 4-3/4" bit and drill collars. Trip in hole on 8-7/8" workstring.
- 3) Drill out cement plug from surface to 10'.
- 4) Drill out cement plug from 890' to 17/2'.
- 5) Drill out cement from 3559' to 3685', Drill out Bridge Plug at 3685'.
- 6) Drill New hole from 3753' to 4040. Circulate hole clean and pull out of hole.
- 7) Run in hole with 538' of 2-7/8" 6.5% j-55 liner on 2-7/8" workstring. Set liner on bottom and establish circulation.
- 8) Notify regulatory agency and pump 50 sx class "C" cement.

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Annular Space calculation:

Have 323' of 2-7/8" x 4-3/4" (.078 FT3/FT) = 25.19 FT3 Have 215' of 2-7/8" x 5-1/2" (.0886 FT3/FT) = 19.05 FT3 Total Annular Space = 44.24 FT3

Class "C" cement yield is 1.32 FT3 / Sack = 33.52 SX Use 50% Excess = 50 sx

- 9) Turn off of liner top and reverse tubing clean. Pull out of hole. Wait 48 hrs for cement to harden.
- 10) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 2-7/8" liner. If Cement top is well into the 5-1/2" casing proceed to Step 11. If Cement top is not into the 5-1/2" casing then continue with this step.
- a) Trip in hole with 5-1/2" packer. and set packer 250° above liner top or (3252°). Notify regulatory agency and squeeze liner top with 25 sx of class "C" cement. Leave Packer set over night. Check for flowback. Pull out of hole.
- b) Trip in hole with 4-3/4" bit and clean out to liner top. Pull out of hole.
- 11) Trip in hole with 2-1/4" blade bit and clean out to 3960'. Circlate hole clean and pull out of hole.

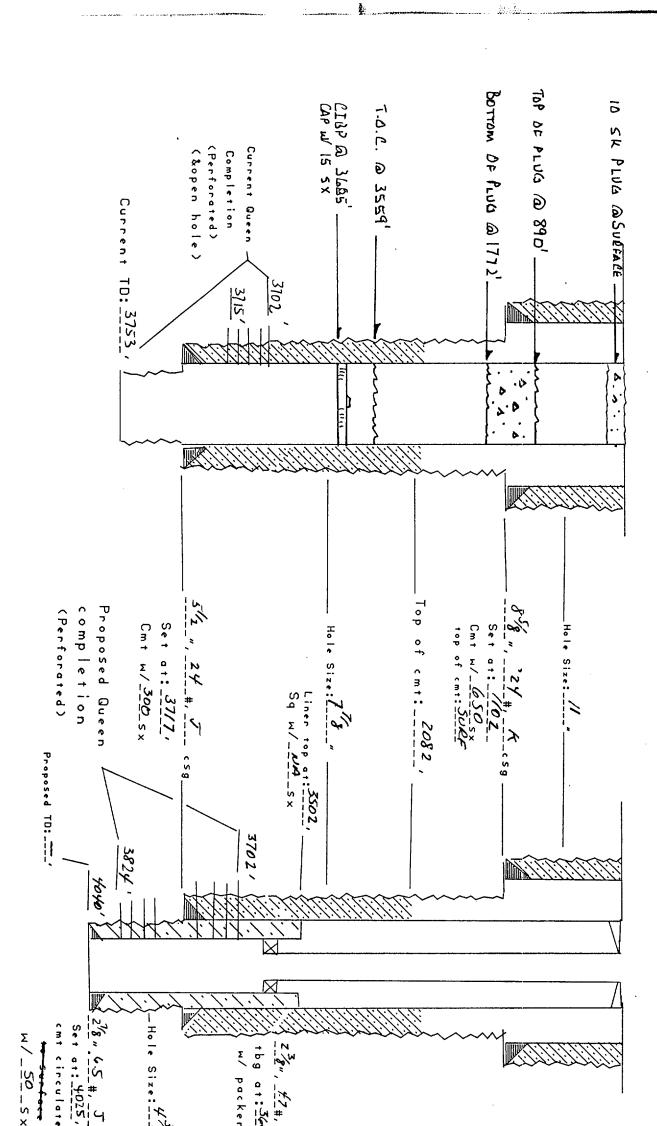
- 12) Rig up wireline and run GR-CNL-CCL from 3960' up to 2000', run GR from 2000' up to surface.
- 13) Run in hole with perforating guns, and perforate Queen (approx. 3702' to 3824'). Pull out of hole.
- 14) Run in hole with with packer on thy, and treat Gueen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 15) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 16) Nipple up Injection head, and place well on injection.
- 17) File completion report to proper regulatory agency.

Sirgo Operating Inc.

* West Dollarhide Queen Sand Unit

Well No.:_____

Current Weilbore Diagram



West Dollarhide Gueen Sand Unit Well No. 3

Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pick 4-3/4" bit and drill collars. Trip in hole on 2-7/8" workstring.
- 3) Drill out cement plug from surface to 10%.
- 4) Drill out cement plug from 909' to 1791'.
- 5) Drill out cement from 3524' to 3650', Drill out Bridge Plug at 3650'. Drill out emt from 3694' to 3714'.
- 6) Drill New hole from 3714' to 4054. Circulate hole clean and pull out of hole.
- 7) Run in hole with 5**88**° of 2-7/8" 6.5# j-55 liner on 2-7/8" workstring. Set liner on bottom and establish circulation.
- 8) Notify regulatory agency and pump 50 sx class "C" cement.

Annular Space calculation:

Have 358' of 2-7/8" x 4-3/4" (.078 F)3/F) = 27.92 F)3 Have 211' of 2-7/8" x 5-1/2" (.0886 F)3/F) = 18.69 F)3 Total Annular Space = 46.61 F)3

Class "C" cement yield is 1.32 FT3 / Sack = 36.31 SX Use 50% Excess = 50 sx

- 9) furn off of liner top and reverse tubing clean. Pull out of hole. Wait 48 hrs for cement to harden.
- 10) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 2-7/8" liner. If Cement top is well into the 5-1/2" casing proceed to Step 11. If Cement top is not into the 5-1/2" casing then continue with this step.
- a) Trip in hole with 5-1/2" packer, and set packer 250' above liner top or (3235'). Notify regulatory agency and squeeze liner top with 25 sx of class "C" cement. Leave Packer set over night. Check for flowback. Pull out of hole.
- b) Trip in hole with 4-3/4" bit and clean out to liner top. Pull out of hole.
- 11) Trip in hole with 2-1/4" blade bit and clean out to 3974'. Circlate hole clean and pull out of hole.

- 12) Rig up wireline and run GR-CNL-CCL from 3974' up to 2000', run GR from 2000' up to surface.
- 13) Run in hole with perforating guns, and perforate Gueen (approx. 3685' to 3736'). Pull out of hole.
- 14) Run in hole with with packer on thm, and treat Gueen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 15) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 16) Nipple up Injection head, and place well on injection.
- 17) File completion report to proper regulatory agency.

75 61 BOTTOM DF PLUG @ 1791 TOL AWG @ 909 CIBP @ 3650 CAP w/ 15 5x TOC @ 3514 PLUG O SURFACE (&open hole) (Perforated) Current Queen Current TD: 37/4. 3633 3685 20870 = 3694 S Top of cmt: 2395 completion Proposed Queen (Perforated) 5/2", 14_#, ___ Set at: 3696, Cmt w/ 300sx top of cmt: 5005 Hole Size: 7 6 ... Liner top at: 3 185,
Sq W/ NA_Sx Proposed TD:_____ 3685 4054 Y \$ 28". 65.#, J- cs9 }-Hole Size: 434" cmt circulated 23/2, 47#, J tbg at: 3585'

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W/__0__Sx

Sirgo Operating Inc.
*West Dollarhide Queen Sand Unit
Well No.:__3__

Current Wellbore Diagram

West Dollarhide Queen Sand Unit Well No. 5 Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pick 4-3/4" bit and drill collars. Trip in hole on 2-7/8" workstring.
- 3) Drill out cement plug from surface to 10'.
- 4) Drill out cement plug from 986' to 1808'.
- 5) Drill out cement from 3318' to 3514', Drill out Bridge Plug at 3514'.
- 6) Drill New hole from 3756' to 4054. Circulate hole clean and pull out of hole.
- 7) Run in hole with 568' of 2-7/8" 6.5% j-55 liner on 2-7/8" workstring. Set liner on bottom and establish circulation.
- 8) Notify regulatory agency and pump 50 sx class "C" cement.

Annular Space calculation:

Have 269' of 2-7/8" \times 4-3/4" (.078 FT3/FT) = 20.98 FT3 Have 299' of 2-7/8" \times 5-1/2" (.0886 FT3/FT) = 26.49 FT3 Total Annular Space = 47.47 FT3

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Class "C" cement yield is 1.32 Ff3 / Sack = 35.96 SX Use 50% Excess = 50 sx

- 9) Turn off of liner top and reverse tubing clean. Pull out of hole. Wait 48 hrs for cement to harden.
- 10) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 2-7/8" liner. If Cement top is well into the 5-1/2" casing proceed to Step 11. If Cement top is not into the 5-1/2" casing then continue with this step.
- a) Trip in hole with 5-1/2" packer, and set packer 250' above liner top or (3486'). Notify regulatory agency and squeeze liner top with 25 sx of class "C" cement. Leave Packer set over night. Check for flowback. Pull out of hole.
- b) Trip in hole with 4-3/4" bit and clean out to liner top. Pull out of hole.
- 11) Trip in hole with 2-1/4" blade bit and clean out to 3974'. Circlate hole clean and pull out of hole.

- 12) Rig up wireline and run GR-CNL-CCL from 3974' up to 2000', run GR from 2000' up to surface.
- 13) Run in hole with perforating guns, and perforate Queen (approx. 3686' to 3846'). Pull out of hole,
- 14) Run in hole with with packer on thg, and treat Gueen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Full out of hole.
- 15) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 16) Nipple up Injection head, and place well on injection.
- 17) File completion report to proper regulatory agency.

Sirgo Operating Inc.

West Dollarhide Queen Sand Unit

Well No.:______

Current Hellbore Diagras

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West Dollarhide Queen Sand Unit Well No. 7 Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Unset packer and pull tubing and packer out of hole.
- 3) Run in hole with 4-3/4" bit and collars on 2-7/8" workstring.
- 4) Drill new hole from 3820' to 4030', circulate hole clean and pull out of hole.
- 5) Run in hole with 520' of 2-7/8" 6.5# j-55 liner on 2-7/8" workstring. Set liner on bottom and establish circulation.
- 6) Notify regulatory agency and pump 50 sx class "C" cement.

Annular Space calculation:

Have 320' of 2-7/8" x 4-3/4" (.078 FT3/FT) = 24.96 FT3 Have 200' of 2-7/8" x 5-1/2" (.0886 FT3/FT) = 17.72 FT3 Total Annular Space = 42.68 FT3

Class "C" cement yield is 1.32 FT3 / Sack = 32.33 SX Use 50% Excess = 50 sx

- 7) Turn off of liner top and reverse tubing clean. Pull out of hole. Wait 48 hrs for cement to harden.
- 8) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 2-7/8" liner. If Cement top is well into the 5-1/2" casing proceed to Step 9. If Cement top is not into the 5-1/2" casing then continue with this step.
- a) Trip in hole with 5-1/2" packer, and set packer 250' above liner top or (3260'). Notify regulatory agency and squeeze liner top with 25 sx of class "C" cement. Leave Packer set over night. Check for flowback. Pull out of hole.
- b) Trip in hole with 4-3/4" bit and clean out to liner top. Pull out of hole.
- 9) Trip in hole with $2-1/4^{\circ}$ blade bit and clean out to 3974°. Circlate hole clean and pull out of hole.
- 10) Rig up wireline and run GR-CNL-CCL from 3950' up to 2000', run GR from 2000' up to surface.
- 11) Run in hole with perforating guns, and perforate Gueen (approx. 3704' to 3880'). Pull out of hole.

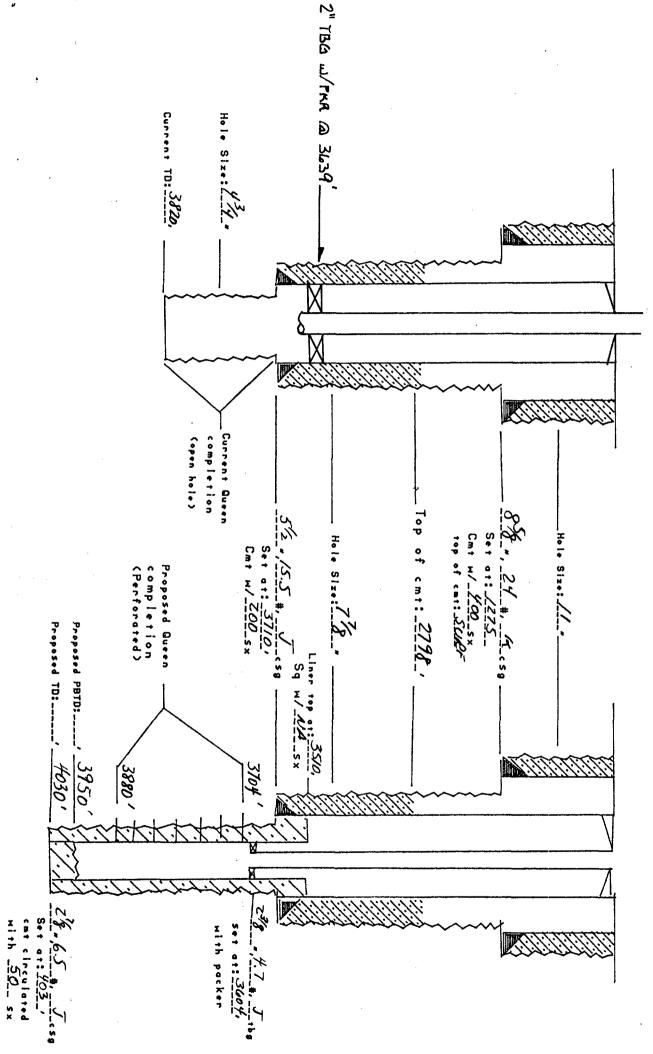
- 12) Run in hole with with packer on thu, and treat Queen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 13) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 14) Nipple up Injection head, and place well on injection.
- 15) File completion report to proper regulatory agency.

Sirgo Operating Inc.

West Dollarhide Queen Sand Unit

Well No.:_____

Current Wellbore Diagram



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West Dollarhide Queen Sand Unit Well No. 15 Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pick 6-1/8" bit and drill collars. Trip in hole on 2-7/8" workstring.
- 3) Drill out tight spot at 2000'.
- 4) Drill out CIBP at 3502.
- 5) Drill New hole from 3806' to 3950. Circulate hole clean and pull out of hole.
- 6) Run in hole with 3950' of 4-1/2" 10.5# j-55 liner. Set liner on bottom and establish circulation.
- 7) Notify regulatory agency and pump 585 sx class "C" cement.

Annular Space calculation:

Have 381' of 4-1/2" x 6-1/8" (.0859 F13/F1) = 27.57 F13 Have 3629' of 4-1/2" x 7" (.1338 Ff3/Ff) = 485.56 Ff3 Total Annular Space = 513.13 F13

Class "C" cement yield is 1.32 FT3 / Sack = 388.73 SX Use 50% Excess = 585 sx

- 8) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 4-1/2" csq.
 - a) Perform a braden head squeeze if necessary.
- 9) Trip in hole with 3-3/4" blade bit and clean out to 38/0". Circlate hole clean and pull out of hole.
- 10) Rig up wireline and run GR-CNL-CCL from 3870' up to 2000', run GR from 2000' up to surface.
- 11) Run in hole with perforating guns, and perforate Gueen (approx. 3630' to 3850'). Pull out of hole.
- 12) Kun in hole with with packer on the and treat Queen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 13) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 14) Nipple up injection head, and place well on injection.

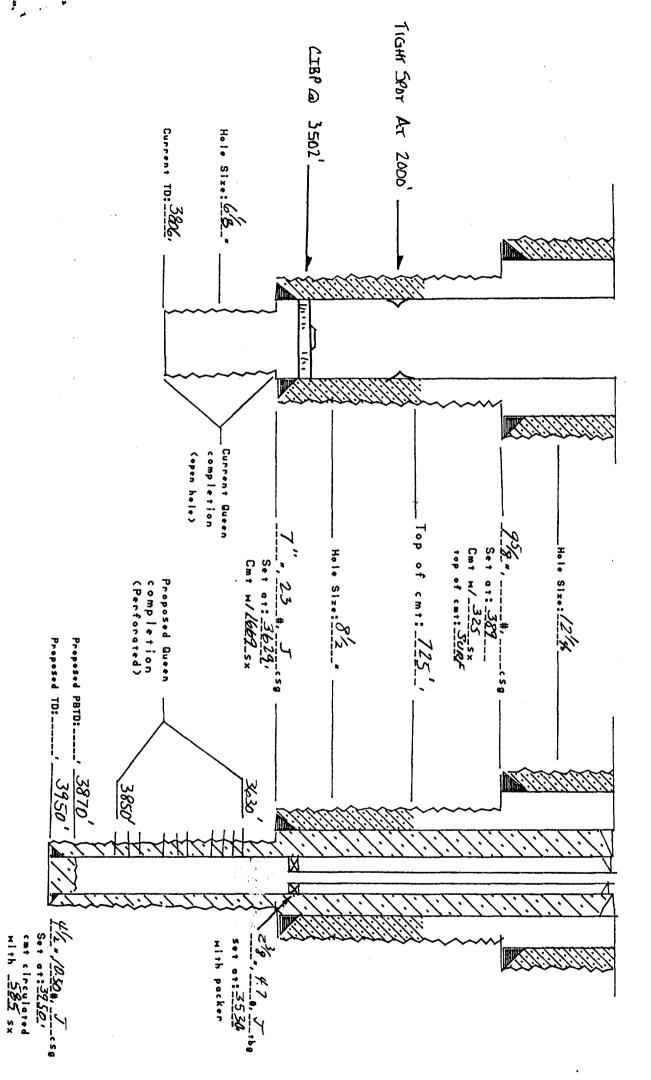
15) File completion report to proper regulatory agency.

Sirgo Operating Inc.

West Dollarhide Queen Sand Unit

Well No.: 15__

Current Wellbore Diagram .



West Dollarhide Queen Sand Unit Well No. 19 Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pick 6-1/8" bit and drill collars. Trip in hole on 2-7/8" workstring.
- 3) Drill out tight spot at 2000%.
- 4) Drill out pkr and 4'tbg at 3/10'.
- 5) Drill out cement from 3720' to 3755'.
- 6) Drill New hole from 3755' to 3873. Circulate hole clean and pull out of hole.
- 7) Run in hole with 3873' of 4-1/2" 10.5# j-55 liner. Set liner on bottom and establish circulation.
- 7) Notify regulatory agency and pump 585 sx class "C" cement.

Annular Space calculation:

Have 118' of 4-1/2" \times 6-1/8" (.0859 F13/FT) = 10.13 F13 Have 3755' of 4-1/2" \times 7" (.1338 FT3/FT) = 502.42 F13 Total Annular Space = 512.55 F13

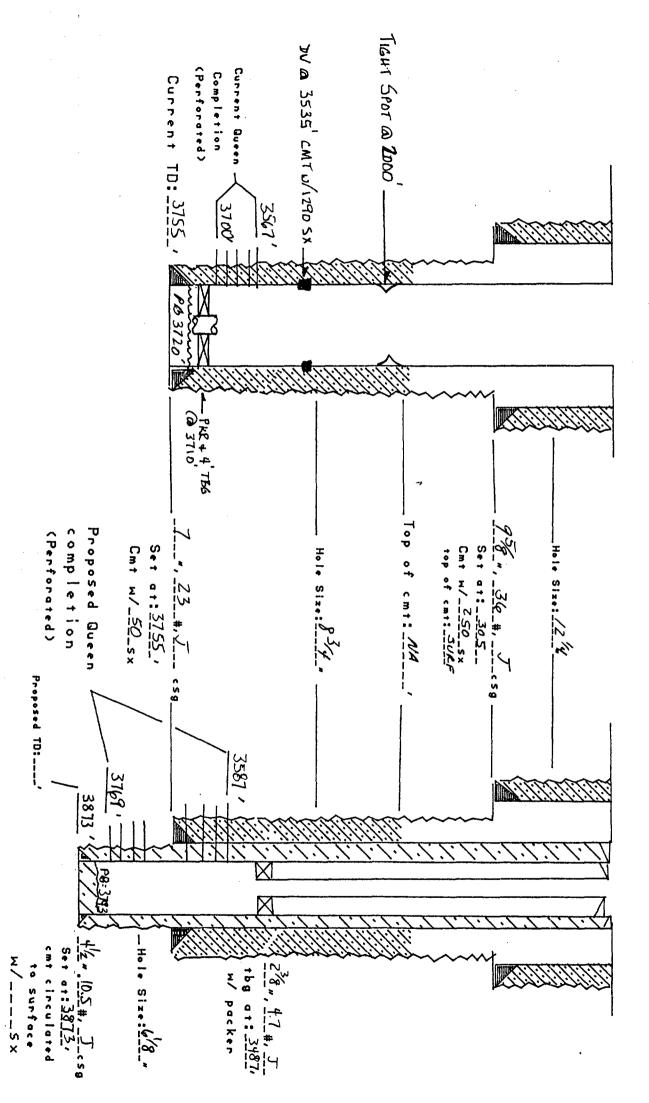
Class "C" cement yield is 1.32 FT3 / Sack = 388.29 SX Use 50% Excess = 585 sx

- 8) After 24 hrs. Rig up wireline and run coment bond tog to check for height of cement behind 4-1/2" esq.
 - a) Perform a braden head squeeze if necessary.
- 9) Trip in hole with 3-3/4" blade bit and clean out to 3793. Circlate hole clean and pull out of hole.
- 10) Rig up wireline and run GR-CNL-CCL from 3870' up to 2000', run GR from 2000' up to surface.
- 11) Run in hole with perforating guns, and perforate Queen (approx. 3587' to 3769'). Pull out of hole.
- 12) Run in hole with with packer on thy, and treat Queen with 4000 gals of 15% HCL . Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 13) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer. Notify regulatory agency and test backside to 500 psi for 30 minutes.

- 14) Nipple up Injection head, and place well on injection.
- 15) File completion report to proper regulatory agency.

Sirgo Operating Inc.
West Dollarhide Queen Sand Unit
Hell No.:_____

Current Hellbore Diagram



West Dollarhide Queen Sand Unit Well No. 22 Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pull tubing and rods out of hole.
- 3) Run in hole with 4-3/4" bit and collars on 2-7/8" workstring.
- 4) Drill new hole from 3727' to 3984', circulate hole clean and pull out of hole.
- 5) Run in hole with 545' of 2-7/8" 6.5# j-55 liner on 2-7/8" workstring. Set liner on bottom and establish circulation.
- 6) Notify regulatory agency and pump 50 sx class "E" cement.

Annular Space calculation:

Have 304' of 2-7/8" \times 4-3/4" (.078 FT3/FT) = 23.71 FT3 Have 241' of 2-7/8" \times 5-1/2" (.0886 FT3/FT) = 21.31 FT3 Total Annular Space = 45.02 FT3

Class "C" cement yield is 1.32 FT3 / Sack = 34.11 SX Use 50% Excess = 50 sx

- 7) furn off of liner top and reverse tubing clean. Pull out of hole. Wait 48 hrs for cement to harden.
- 8) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 2-7/8" liner. If Cement top is well into the 5-1/2" casing proceed to Step 9. If Cement top is not into the 5-1/2" casing then continue with this step.
- a) Trip in hole with 5-1/2" packer, and set packer 250° above liner top or (3439°). Notify regulatory agency and squeeze liner top with 25 sx of class "C" cement. Leave Packer set over night. Check for flowback. Pull out of hole.
- b) Trip in hole with 4-3/4" bit and clean out to liner top. Pull out of hole.
- 9) Trip in hole with 2-1/4" blade bit and clean out to 3904". Circlate hole clean and pull out of hole.
- 10) Rig up wireline and run GR-CNL-CCL from 3904' up to 2000', run GR from 2000' up to surface.
- 11) Run in hole with perforating guns, and perforate Gueen (approx. 3639' to 3801'). Pull out of hole.

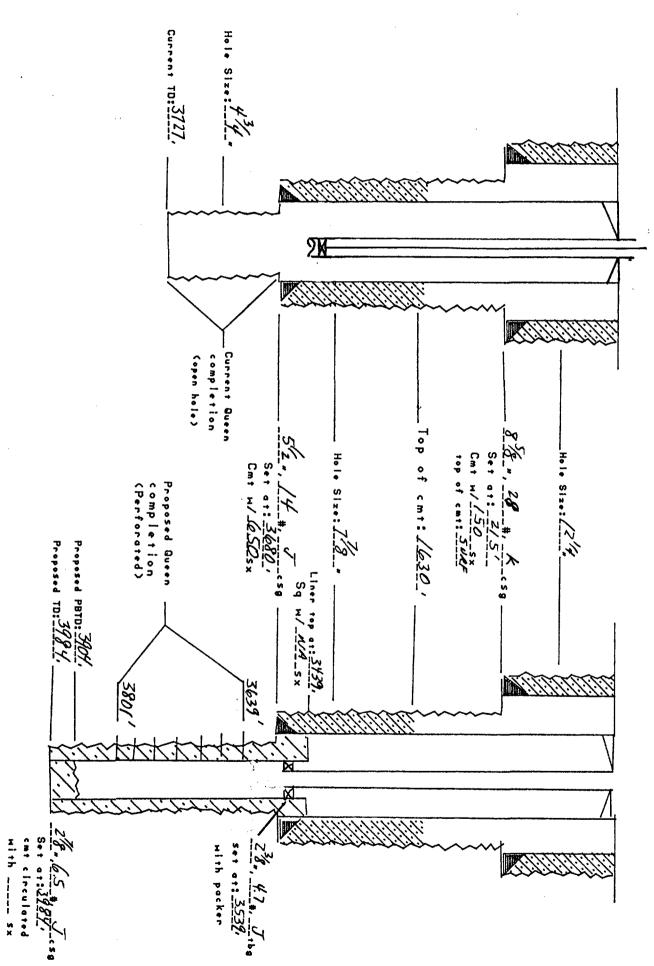
- 12) Run in hole with with packer on thy, and treat Queen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 13) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 14) Nipple up Injection head, and place well on injection.
- 15) File completion report to proper regulatory agency.

Sirgo Operating Inc.

West Dollarhide Queen Sand Unit

Well No.: ZZ___

Current Wellbore Diagram



West Dollarhide Gueen Sand Unit Well No. 27 Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pull tubing and rods out of hole.
- 3) Run in hole with 4-3/4" bit and collars on 2-7/6" workstring.
- 4) Drill new hole from 3812' to 4030', circulate hole clean and pull out of hole.
- 5) Run in hole with 590% of 2-7/8% 6.5% j-55 liner on 2-7/8% workstring. Set liner on bottom and establish circulation.
- 6) Notify regulatory agency and pump 50 sx class "6" dement.

Annular Space calculation:

Have 390' of 2-7/8" \times 4-3/4" (.078 F13/FT) = 30.42 F13 Have 200' of 2-7/8" \times 5-1/2" (.0886 F13/FT) = 17.72 F13 Total Annular Space = 48.14 FT3

Class "C" cement yield is 1.32 FT3 / Sack = 36.46 SX Use 50% Excess = 50 sx

- 7) furn off of liner top and reverse tubing clean. Pull out of hole. Wait 48 hrs for cement to harden.
- 8) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 2-7/8" liner. If Cement top is well into the 5-1/2" casing proceed to Step 9. If Cement top is not into the 5-1/2" casing then continue with this step.
- a) Trip in hole with 5-1/2" packer, and set packer 250° above liner top or (3190°). Notify regulatory agency and squeeze liner top with 25 sx of class "C" cement. Leave Packer set over night. Check for flowback. Pull out of hole.
- b) Trip in hole with 4-3/4" bit and clean out to liner top. Pull out of hole.
- 9) Trip in hole with $2-1/4^{\prime\prime}$ blade bit and clean out to 3950%. Circlate hole clean and pull out of hole.
- 10) Rig up wireline and run GR-CNL-CCL from 3950' up to 2000', run GR from 2000' up to surface.
- 11) Run in hole with perforating guns, and perforate Queen (approx. 3666' to 3816'). Pull out of hole.

- 12) Run in hole with with packer on thu, and treat Queen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 13) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 14) Nipple up Injection head, and place well on injection.
- 15) File completion report to proper regulatory agency.

DV @ 1266 CMT W/ NA 2% TBG ON PKR AT 3557 Current TD: 38/1. Hole Size: 43/4" completion Current Queen (open hole) Top of cmt: _LAA___ Holo Size: Z/8-Set at: top of cmt: JURE Set at: 36×0. Cmt W/300.5x completion (Perforated) Proposed Queen Proposed TD: 4030. Proposed PBTD:3950 2 8", 6.5 #, T ... so 2卷., 生7 #, 工 168 son on: 3566. with packer

100

with _50_ sx

Sirgo Operating Inc.
West Dollarhide Queen Sand Unit
Well No.: 27__

Current Wellbore Diagram

West Dollarhide Queen Sand Unit Well No. 30 Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pull tubing and rods out of hole.
- 3) Run in hole with 4-3/4" bit and collars on 2-7/8" workstring.
- 4) Drill up mud anchor and new hole from 3770' to 3975'. circulate hole clean and pull out of hole.
- 5) Run in hole with 595' of 2-7/8" 6.54 j-55 liner on 2-7/8" workstring. Set liner on bottom and establish circulation.
- 6) Notify regulatory agency and pump 50 sx class "E" cement.

Annular Space calculation:

Have 395' of 2-7/8" \times 4-3/4" (.078 FT3/FT) = 30.81 FT3 Have 200' of 2-7/8" \times 5-1/2" (.0886 FT3/FT) = 17.72 FT3 Total Annular Space = 48.53 FT3

Class "C" cement yield is 1.32 FT3 / Sack = 36.76 SX Use 50% Excess = 50 sx

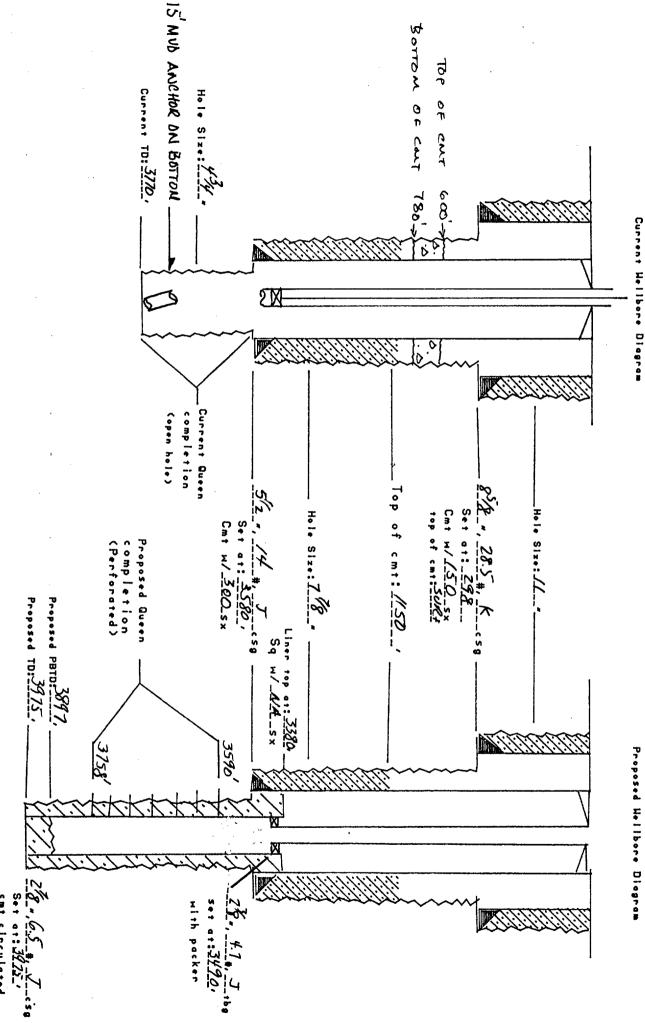
- 7) furn off of liner top and reverse tubing clean. Pull out of hole. Wait 48 hrs for cement to harden.
- 8) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 2-7/8" liner. If Cement top is well into the 5-1/2" casing proceed to Step 9. If Cement top is not into the 5-1/2" casing then continue with this step.
- a) Trip in hole with 5-1/2" packer. and set packer 250' above liner top or (3130'). Notify regulatory agency and squeeze liner top with 25 sx of class "C" cement. Leave Packer set over night. Check for flowback. Pull out of hole.
- b) Trip in hole with 4-3/4" bit and clean out to liner top. Pull out of hole.
- 9) Trip in hole with 2-1/4" blade bit and clean out to 3897". Circlate hole clean and pull out of hole.
- 10) Rig up wireline and run GR-CNL-CCL from 3897' up to 2000', run GR from 2000' up to surface.
- 11) Run in hole with perforating guns, and perforate Queen (approx. 3590' to 3758'). Pull out of hole.

- 12) Run in hole with with packer on thu, and treat Queen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 13) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 14) Nipple up injection head, and place well on injection.
- 15) File completion report to proper regulatory agency.

W. 11 No .: 30

West Dollarhide Queen Sand Unit

Sirgo Operating Inc.



with _50 sx

West Dollarhide Queen Sand Unit Well No. 32

Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pull tubing and packer out of hole.
- 3) Run in hole with 4-3/4" bit and collars on 2-7/8" workstring.
- 4) Drill new hole from 3748' to 3934', circulate hole clear and pull out of hole.
- 5) Run in hole with 462° of 2-7/8'' 6.5# j-55 liner on 2-7/8'' workstring. Set liner on bottom and establish circulation.
- 6) Notify regulatory agency and pump 45 sx class "C" cement.

Annular Space calculation:

Have 262' of 2-7/8" \times 4-3/4" (.078 F13/FT) = 20.44 F13 Have 200' of 2-7/8" \times 5-1/2" (.0886 F13/FT) = 17.72 F13 Total Annular Space = 38.53 FT3

Class "C" cement yield is 1.32 Ff3 / Sack = 28.90 SX Use 50% Excess = 45 sx

- 7) furn off of liner top and reverse tubing clean. Pull out of hole. Wait 48 hrs for cement to harden.
- 8) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 2-7/8" liner. If Cement top is well into the 5-1/2" casing proceed to Step 9. If Cement top is not into the 5-1/2" casing then continue with this step.
- a) Trip in hole with 5-1/2" packer, and set packer 250° above liner top or (3222°). Notify regulatory agency and squeeze liner top with 25 sx of class "C" cement. Leave Packer set over night. Check for flowback. Pull out of hole.
- b) Trip in hole with 4-3/4" bit and clean out to liner top. Pull out of hole.
- 9) Trip in hole with 2-1/4" blade bit and clean out to 3854'. Circlate hole clean and pull out of hole.
- 10) Rig up wireline and run GR-CNL-CCL from 3854' up to 2000', run GR from 2000' up to surface.
- 11) Run in hole with perforating guns, and perforate Gueen (approx. 3562' to 3760'). Pull out of hole.

- 12) Run in hole with with packer on thu, and treat Queen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 13) Run in hole with packer and 2-3/8" 4./# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 14) Nipple up Injection head, and place well on injection.
- 15) File completion report to proper regulatory agency.

Current Queen Topen hole) Completion Current TD: 3748_' 1 23/9 TBG ON PKR @ 3596 5½, ", 15.5, #, _J Top of cmt: _ (560, completion Proposed Queen (Perforated) Set at: 3672, Cmt w/_150_sx Set at: 196__ Cmt W/ 1050sx Hole Size: 12/4 Sq W/_NA_sx Proposed TD: 3934, 3562' 3760 - Hole Size: 454 " 23".65#, J-csg cmt circulated Set at: 3934, tbg at: 3462 元, 47, 4, 五 w/ packer

W/== 45 5 x

Sirgo Operating Inc.

West Dollarhide Queen Sand Unit

Well No.: 32___

Current Wellbore Diagram

- 12) Run in hole with with packer on thu, and treat Queen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 13) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 14) Nipple up Injection head, and place well on injection.
- 15) File completion report to proper regulatory agency.

Sirgo Operating Inc.

West Dollarhide Queen Sand Unit

Well No.: 32_

Current Hellbore Diagram

Current Queen Completion (open hole) Current TD: 3736. 238" TBG ON PKR @ 3492" Top of cmt: _ 900____ completion Proposed Queen (Perforated) Set at: 36/3, Cmt w/_/50_5x Cmt W/_750_sx top of cmt: SURE Einer top at: 3443 Sq W/_MAL_5x Proposed TD:_____ }-Hole Size: 45/4" 216".65 #, J cs9 cmt circulated 1 +bg at: 3521/ w/ packer

W/_50_sx

West Dollarhide Gueen Sand Unit Well No. 38 Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pull tubing and packer out of hole.
- 3) Run in hole with 4-3/4" bit and collars on 2-7/6" workstring.
- 4) Drill new hole from 3790' to 3970', circulate hole clear and pull out of hole.
- 5) Run in hole with 503' of 2-7/8" 6.5# j-55 liner on 2-7/8" workstring. Set liner on bottom and establish circulation.
- 6) Notify regulatory agency and pump 50 sx class "C" cement.

Annular Space calculation:

Have 303' of 2-7/8" \times 4-3/4" (.078 FT3/FT) = 23.63 FT3 Have 200' of 2-7/8" \times 5-1/2" (.0886 FT3/FT) = 17.72 FT3 Total Annular Space = 41.35 FT3

Class "C" cement yield is 1.32 FT3 / Sack = 31.32 SX Use 50% Excess = 50 sx

- 7) furn off of liner top and reverse tubing clean. Pull out of hole. Wait 48 hrs for cement to harden.
- 8) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 2-7/8" liner. If Cement top is well into the 5-1/2" casing proceed to Step 9. If Cement top is not into the 5-1/2" casing then continue with this step.
- a) Trip in hole with 5-1/2" packer. and set packer 250' above liner top or (3217'). Notify regulatory agency and squeeze liner top with 25 sx of class "C" cement. Leave Packer set over night. Check for flowback. Pull out of hole.
- b) Trip in hole with 4-3/4" bit and clean out to liner top. Pull out of hole.
- 9) Trip in hole with 2-1/4" blade bit and clean out to 3880. Circlate hole clean and pull out of hole.
- 10) Rig up wireline and run GR-CNL-CCL from 3880' up to 2000', run GR from 2000' up to surface.
- 11) Run in hole with perforating guns, and perforate Gueen (approx. 3611' to 3789'). Pull out of hole.

- 12) Run in hole with with packer on thu, and treat Queen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 13) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 14) Nipple up Injection head, and place well on injection.
- 15) File completion report to proper regulatory agency.

Current Queen (open hole) Completion Current TD: 3790, Top of cmt: 2761_' completion Proposed Queen (Perforated) Set at: 3667_' Cmt w/_420__sx
top of cmt:_5486 Cmt w/ 200_5 x Set at: 1202_ Hole Size: 7/8_" Sq W/_MA_Sx Proposed TD: ____ 3970 Ser 01:39.70)-Hole Size: 474" cmt circulated 25, 47 #, I w/ packer

w/_50__s x

Sirgo Operating Inc.

West Dollarhide Queen Sand Unit

Well No.: 38_

Current Hellbore Diagram

West Dollarhide Gueen Sand Unit Well No. 39 Procedure for deepening and Completing as an Injection Well

- 1) Notify regulatory agency and move in, rig up pulling unit and reverse unit.
- 2) Pull tubing and packer out of hole.
- 3) Run in hole with 4-3/4" bit and collars on 2-7/6" workstring.
- 4) Drill 10' cement plug at surface.
- 5) Orill cement plug from 884' to 1/66'.
- 6) Drill cement from 3514' to 3640' and CIBP at 3640'.
- 7) Drill new hole from 3815' to 3954'. circulate hole clean and pull out of hole.
- 8) Run in hole with 474° of 2-7/8" 6.5% j-55 liner on 2-7/8" workstring. Set liner on bottom and establish circulation.
- 9) Notify regulatory agency and pump 45 sx class "C" cement.

Annular Space calculation:

Have 274' of 2-7/8" x 4-3/4" (.078 FT3/FT) = 21.37 FT3 Have 200' of 2-7/8" x 5-1/2" (.0886 FT3/FT) = 17.72 FT3 Total Annular Space = 39.09 FT3

Class "C" cement yield is 1.32 FT3 / Sack = 29.81 SX Use 50% Excess = 45 sx

- 10) Turn off of liner top and reverse tubing clean. Pull out of hole. Wait 48 hrs for cement to harden.
- 11) After 24 hrs. Rig up wireline and run cement bond log to check for height of cement behind 2-7/8" liner. If Cement top is well into the 5-1/2" casing proceed to Step 12. If Cement top is not into the 5-1/2" casing then continue with this step.
- a) Trip in hole with 5-1/2" packer. and set packer 250° above liner top or (3230°). Notify regulatory agency and squeeze liner top with 25 sx of class "C" cement. Leave Packer set over night. Check for flowback. Pull out of hole.
- b) Trip in hole with 4-3/4" bit and clean out to liner top. Pull out of hole.
- 12) Trip in hole with 2-1/4" blade bit and clean out to 3874'. Circlate hole clean and pull out of hole.

- 13) Rig up wireline and run 6K-CNL-CCL from 3874' up to 2000', run 6R from 2000' up to surface.
- 14) Run in hole with perforating guns, and perforate Queen (approx. 3611' to 3789'). Pull out of hole.
- 15) kun in hole with with packer on thm, and treat Queen with 4000 gals of 15% HCL. Shut in for 30 minutes, and flow back residue. Pull out of hole.
- 16) Run in hole with packer and 2-3/8" 4.7# J-55 internally plastic coated tubing, set packer in liner top. Notify regulatory agency and test backside to 500 psi for 30 minutes.
- 17) Nipple up Injection head, and place well on injection.
- 18) File completion report to proper regulatory agency.

Sirgo Operating Inc.

West Dollarhide Queen Sand Unit

Well No.: 31

Current Wellbore Diagram

No.: 39_

Proposed Wellbore Diagram

BATTOM OF PLUS @ 1766' TOP OF PLUA DO 884' Current Queen Completion ropen hole) Current TD: 38/5_ CIBP AT 3640 TOP OF CMT @ 3514 Top of cmt: 2461_' completion Proposed Queen (Perforated) 85, -24, #, £-.cs9 Set at: 3650, Cmt w/_400__sx Cmt w/_200_sx Set at: 1240___ Hole Size: 7/8-Liner top at: 3480 Sq W/_WA_Sx Proposed TD: 395H Ser 01:3251, 5-059 }-Hole Size: Y-Y" cmt circulated 1 tbg at: 35/1/ W/ 45__sx w/ packer