UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION IX (EPA)
UNDERGROUND INJECTION CONTROL (UIC) PROGRAM

FINAL PERMIT

Class IID Water Injection Well

Permit No. NN207000002

Well Name: Aneth Unit C-113 LDVL SWD

San Juan County, Utah

Navajo Nation

API No. 4303731852

Issued to:

Resolute Natural Resources Company

1675 Broadway, Suite 1950

Denver, Colorado 80202

C. SEVERABILITY 13

D. CONFIDENTIALITY 14

E. GENERAL DUTIES AND REQUIREMENTS 14
1. Duty to Comply 14
2. Penalties for Violations of Permit Conditions 14
3. Need to Halt or Reduce Activity not a Defense 14
4. Duty to Mitigate 14
5. Proper Operation and Maintenance 14
6. Duty to Provide Information 15
7. Inspection and Entry 15
8. Records of the Permit Application 15
9. Signatory Requirements 15
10. Reporting of Noncompliance 15
(a) Anticipated Noncompliance 15
(b) Compliance Schedules 15
(c) Twenty-four Hour Reporting 15
(d) Other Noncompliance 16
(e) Other Information 16

APPENDIX A - Plugging and Abandonment Plan (s) 17

APPENDIX B - Reporting Forms and Instructions 18

APPENDIX C - Well Schematic(s) 19

APPENDIX D - Reference Materials 20

PART II. SPECIFIC PERMIT CONDITIONS

A. WELL CONSTRUCTION

1. Casing and Cementing. The construction details submitted with the permit application are incorporated into this permit as APPENDIX C (Well Schematic), and shall be binding on the Permittee. The well was cased and cemented to prevent the movement of fluids in the casing wellbore annulus, from the long string casing shoe at 7602 feet to the surface. The casing shall be maintained throughout the operating life of the well. Advanced notice of casing and cementing remedial operations will be given to EPA[1] so that an EPA representative may be present to monitor those operations.

2. Formation Logging and Testing. A Dual Laterolog (DL), Microlog (ML),Gamma Ray/Compensated Neutron Log/Compensated Density Logs (GR/CNL/CDL), Sonic Log (SL), and Cement Bond Log/Gamma Ray (CBL/GR) logs were run from TD to the bottom of intermediate casing at 1618 feet. A pressure fall-off test will be conducted annually for the determination of the static reservoir pressure and permeability of the injection zone and will be reported to the Director[2] within thirty (30) days of the measurement. The Region 9 EPA guidance document for conducting a fall-off test can be found in Appendix D. The test results and evaluation will be reported to the Director within five (5) days of the test and will be subject to the Director's review and approval. Advance notice of logging and fall off test operations shall be given to the Director, so that an EPA representative may be present to witness/monitor those operations.

3. Monitoring Devices. The operator shall install and maintain in good operating condition:

   (a) A tap on the discharge line between the injection pump and the wellhead for the purpose of obtaining representative samples of the injection fluids;

   (b) Two one-half (½) inch FIP (female) fittings, isolated by plug or globe valves, and positioned to provide for either (1), the permanent attachment of one-half (½) inch MIP (male) gauges, or (2), the attachments for equivalent "quick-disconnect" gauges at the wellhead on the injection tubing and on the tubing/casing annulus. The gauges used shall be of a design to provide (1), a full pressure range of 100 percent greater than the anticipated operating pressure, and (2), a certified deviation accuracy of five (5) percent or less throughout the operating pressure range;

   (c) A flow meter with measured cumulative volumes that are certified for a deviation accuracy of five (5) percent or less throughout the range of injection rates allowed by the permit.

4. Proposed Changes and Workovers. The Permittee shall give advance notice to the Director, as soon as possible, of any planned physical alterations or additions to the

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[1] "EPA" refers to the Ground Water Office Manager, U.S. Environmental Protection Agency Region IX, with the associated address shown in part II.D.4

[2] "Director" refers to the Water Division Director, EPA Region IX

demonstrate the isolation of the injection interval and other formations from underground sources of drinking water. USDWs will be protected by means of cementing the long string casing/wellbore annulus from 7602 feet to the surface and placement and cementing of surface casing from 82 feet to surface and intermediate casing from 1618 feet to surface in addition to the installation of tubing and packer assemblies through which injection will occur.

(b) Prohibition without Demonstration. Injection into this well may continue after the effective date of this permit only if:

(i) the well has passed a mechanical integrity test (MIT) in accordance with Part II Section C.1.(a) of this permit and

(ii) the Permittee has received written notice from the Director that the MIT demonstration is satisfactory.

The Permittee shall notify the Director of intent to demonstrate mechanical integrity at least thirty (30) days prior to an official test, unless shorter notice is approved by the Director.

(c) Subsequent Mechanical Integrity Demonstrations

(i) A demonstration of mechanical integrity in accordance with provisions of EPA REGION IX MECHANICAL INTEGRITY TEST (MIT) PART I: REQUIREMENTS FOR INTERNAL TEST, a copy of which is contained in Appendix D attached hereto, shall be conducted at least once every five (5) years during the life of the well, or every three (3) years if the well is tested at less than the maximum allowable injection pressure. Mechanical integrity shall also be demonstrated within thirty (30) days of the time that a workover is conducted or the seal is broken at the wellhead assembly, the construction of the well is modified, or when a loss of mechanical integrity becomes evident during operation.

(ii) It shall be the Permittee's responsibility to arrange and conduct the mechanical integrity demonstrations. The Permittee shall notify the Director of intent to demonstrate mechanical integrity at least thirty (30) days in advance of the demonstration, or a shorter time if approved by the Director. A subsequent notification must be given to the Navajo Nation UIC office at least seventy-two (72) hours in advance of the MIT in order to arrange for a representative to witness the MIT. Results of the test shall be submitted to the Director as soon as possible, but not later than sixty (60) days after the demonstration.

(iii) In addition to any demonstration made under paragraph (I) above, the Director may require a demonstration of mechanical integrity at any time during the permitted life of the well.

(c) Should any increase in rate be requested, the Permittee shall demonstrate to the satisfaction of the Director that the increase in volume will not cause migration of formation or injected fluids into any USDW above or below the injection zone, nor cause any injected fluids to move beyond the Area of Review. If the increased rate requires an increase in the Area of Review, a major permit modification will be required to authorize the increased injection rate.

5. Injection Fluid Limitation.

(a) The Permittee shall not inject any hazardous wastes as defined by the Resource Conservation and Recovery Act (RCRA, see 40 CFR §261) at any time during the operation of the facility.

(b) The well shall be used only for the injection of water produced in connection with the Paradox formation oil production in the Aneth Unit, and produced only from wells owned and operated by the Permittee.

(c) Fluids to be injected other than those described in paragraph (b) above shall be limited to occasional minor amounts of well treatment fluids such as dilute acids and corrosion inhibiting fluids. Injection of any fluids other than those described in paragraph (b) above shall be reported to the Director within thirty (30) days.

D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

1. Injection Well Monitoring Program. Samples and measurements shall be representative of the monitored activity. The Permittee shall utilize the applicable analytical methods described in Table I of 40 CFR §136.3 or, in certain circumstances, other methods that have been approved by the EPA Administrator. Monitoring shall consist of:

(a) Annually, or whenever there is a change in injection fluids, the following analyses of injection fluids shall be performed:

(i) Total Dissolved Solids;
(ii) Major ions;
(iii) pH;
(iv) Specific Conductance;
(v) Specific Gravity: and
(vi) Viscosity.

(b) Annually, measurement of static reservoir pressure; and

(c) Weekly, observations of injection pressure, annulus pressure, flow rate and cumulative volume. Written records of these weekly observations shall be made at least monthly.

2. Monitoring Information. Records of any monitoring activity required under this permit shall include:

(a) Date, exact place, and the time of sampling or field measurements;

Monitoring reports and all other reports required by this permit shall be submitted to the following address:

U.S. Environmental Protection Agency, Region IX
Ground Water Office Manager (Mail Code WTR-9)
75 Hawthorne Street
San Francisco, CA 94105-3901

Copies of all reports shall also be provided to the following:

Underground Injection Control Program
Navajo Nation EPA
P.O. Box 1999
Shiprock, NM 87420

E. PLUGGING AND ABANDONMENT

1. Notice of Plugging and Abandonment. The Permittee shall notify the Director forty-five (45) days before further conversion, workover, or abandonment of the well. The Director may require that the plugging and abandonment be witnessed by an EPA representative.

2. Plugging and Abandonment Plan. The Permittee shall plug and abandon the well as provided in the Plugging and Abandonment Plan and Schematic diagram in Appendix A. The EPA reserves the right to change the manner in which the well will be plugged if the well is modified during its permitted life or if the well is not made consistent with EPA requirements for construction and mechanical integrity. The Director may ask the Permittee to estimate and to update the estimated plugging cost periodically. Such estimates shall be based upon costs which a third party would incur to plug the well according to the plan.

3. Cessation of Injection Activities. After a cessation of operations of two (2) years, the Permittee shall plug and abandon the well in accordance with the Plugging and Abandonment Plan, unless it:

   (a) has provided notice to the Director;

   (b) has demonstrated that the well will be used in the future, and

   (c) has described actions or procedures, satisfactory to the Director that will be taken to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment.

4. Plugging and Abandonment Report. Within sixty (60) days after plugging the well, the Permittee shall submit a report on Form 7520-14 (Appendix B), or an equivalent form, to the Director. The report shall be certified as accurate by the person who performed the plugging operation and the report shall consist of either: (1) a statement that the well was plugged in accordance with the plan, or (2) where actual plugging differed from the plan, a statement specifying the different procedures followed.

PART III. GENERAL PERMIT CONDITIONS

A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The Permittee, as authorized by this permit, shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR §142 or otherwise adversely affect the health of persons.

Any underground injection activity not authorized in this permit or otherwise authorized by permit or rule is prohibited. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations.

B. PERMIT ACTIONS

1. Modification, Revocation and Re-issuance, or Termination.

The Director may, for cause or upon request from the Permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR Sections 124.5, 144.12, 144.39, and 144.40. The permit is also subject to minor modifications for cause as specified in 40 CFR §144.41. The filing of a request for a permit modification, revocation and re-issuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

2. Transfers.

This permit may only be transferred after notice is provided to the Director and the Permittee complies with the requirements of 40 CFR §144.38. The Director may require modification or revocation and re-issuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the SDWA.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the remainder of this permit shall not be affected.

6. Duty to Provide Information. The Permittee shall furnish the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

7. Inspection and Entry. The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

   (a) enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;

   (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

   c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment) practices, or operations regulated or required under this permit; and

   (d) sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

8. Records of the Permit Application. The Permittee shall maintain records of all data required to complete the permit application and any supplemental information submitted for a period of five (5) years from the effective date of this permit. This period may be extended by request of the Director at any time.

9. Signatory Requirements. All reports or other information requested by the Director shall be signed and certified by a responsible corporate officer or duly authorized representative according to 40 CFR §144.32.

10. Reporting of Noncompliance.

   (a) Anticipated Noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

   (b) Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than thirty (30) days following each schedule date.

   c) Twenty-four Hour Reporting.

      (i) The Permittee shall report to the Director any noncompliance which may endanger health or the environment. Information shall be provided within twenty-four (24) hours from the time the Permittee

APPENDIX A - Plugging and Abandonment Plan (s)

OMB No. 2040-0042 Approval Expires 4/30/07

EPA

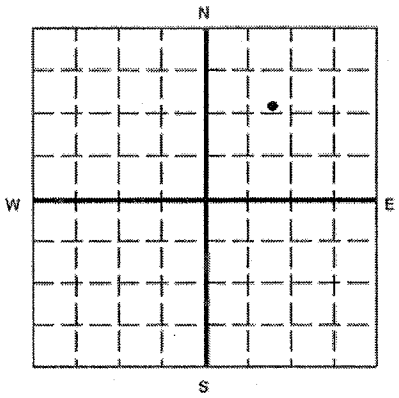
United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

Name and Address of Facility
Resolute Natural Resources Company
1675 Broadway, Suite 1950, Denver, CO 80202

Name and Address of Owner/Operator
Resolute Aneth, LLC.
1675 Broadway, Suite 1950, Denver, CO 80202

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number
Utah	San Juan	

Surface Location Description
1/4 of se 1/4 of nw 1/4 of ne 1/4 of Section 13 Township 40s Range 23e

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface
Location 740 ft. frm (N/S) N Line of quarter section
and 1665 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION
- [x] Individual Permit
- [ ] Area Permit
- [ ] Rule

Number of Wells 1

WELL ACTIVITY
- [ ] CLASS I
- [x] CLASS II
  - [x] Brine Disposal
  - [ ] Enhanced Recovery
  - [ ] Hydrocarbon Storage
- [ ] CLASS III

Lease Name Aneth Unit
Well Number C-113 LDVL

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
16	65	80	80	20
11.75	60	1520	1520	14.75
7.625	26.4 & 33.7	5535	5535	9.5

METHOD OF EMPLACEMENT OF CEMENT PLUGS
- [x] The Balance Method
- [ ] The Dump Bailer Method
- [ ] The Two-Plug Method
- [ ] Other

CEMENTING TO PLUG AND ABANDON DATA:	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	6.5 OH	6.5 OH	6.5 OH	6.5 OH	7.625	7.625	7.625
Depth to Bottom of Tubing or Drill Pipe (ft.)	7267	7225	7183	7141	7217	5850	2130
Sacks of Cement To Be Used (each plug)	19.4	19.4	19.4	19.4	41.97	21.14	21.14
Slurry Volume To Be Pumped (cu. ft.)	23.04	23.04	23.04	23.04	49.53	24.96	24.96
Calculated Top of Plug (ft.)	7167	7125	7083	7041	7030	5750	2030
Measured Top of Plug (if tagged ft.)							
Slurry Wt. (Lb./Gal.)	15.6	15.6	15.6	15.6	15.6	15.6	15.6
Type Cement or Other Material (Class III)	A	A	A	A	A	A	A

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
Perfs: 7335	7470	Lat #4 OH: 7091	10765
Lat #1 OH: 7217	10963		
Lat #2 OH: 7175	10153		
Lat #3 OH: 7133	10831		

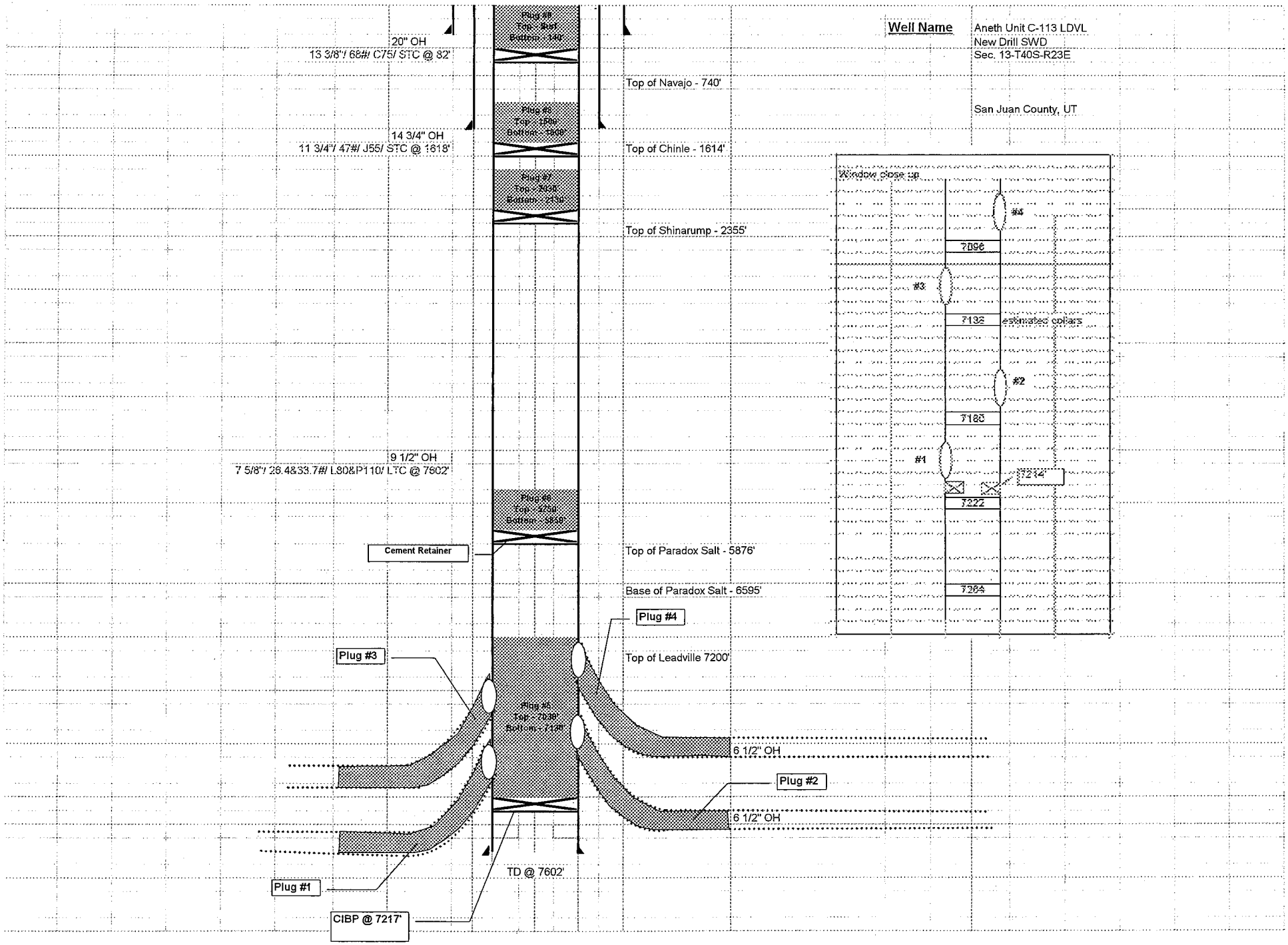
Estimated Cost to Plug Wells
$52,000 See Attachment for additonal cement plugs

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dwight E Mallory, Regulatory Coordinator		5/1/07

EPA Form 7520-14 (Rev. 8-01)


Well Name
Aneth Unit C-113 LDVL
New Drill SWD
Sec. 13-T40S-R23E
San Juan County, UT
20" OH
13 3/8"/ 68#/ C75/ STC @ 82'
14 3/4" OH
11 3/4"/ 47#/ J55/ STC @ 1618'
9 1/2" OH
7 5/8"/ 26.4&33.7#/ L80&P110/ LTC @ 7602'
Top of Navajo - 740'
Top of Chinle - 1614'
Top of Shinarump - 2355'
Top of Paradox Salt - 5876'
Base of Paradox Salt - 6595'
Top of Leadville 7200'
Cement Retainer
Plug #1
Plug #2
Plug #3
Plug #4
6 1/2" OH
6 1/2" OH
TD @ 7602'
CIBP @ 7217'
Window close up
#4
7096
#3
7138
estimated collars
#2
7180
#1
7214'
7222
7264

APPENDIX B - Reporting Forms and Instructions

1. EPA Form 7520 -7:APPLICATION TO TRANSFER PERMIT
2. EPA Form 7520-10:WELL COMPLETION REPORT
3. EPA Form 7520-11:ANNUAL WELL MONITORING REPORT
4. EPA Form 7520-12:WELL REWORK RECORD
5. EPA Form 7520-14:PLUGGING AND ABANDONMENT PLAN

OMB No. 2040-0042 Approval Expires 4/30/07

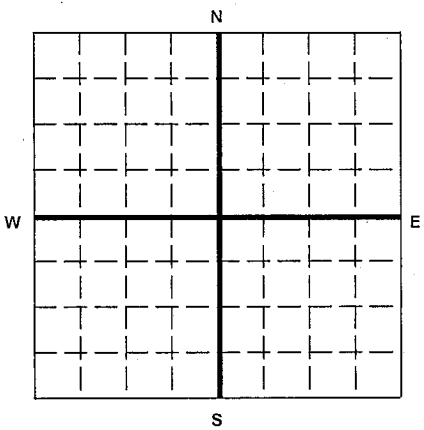
EPA

United States Environmental Protection Agency
Washington, DC 20460

Application To Transfer Permit

Name and Address of Existing Permittee	Name and Address of Surface Owner

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number

Surface Location Description

____ 1/4 of ____ 1/4 of ____ 1/4 of ____ 1/4 of Section ____ Township ____ Range ____

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location ____ ft. frm (N/S) ____ Line of quarter section and ____ ft. from (E/W) ____ Line of quarter section.

Well Activity	Well Status	Type of Permit
____ Class I	____ Operating	____ Individual
____ Class II	____ Modification/Conversion	____ Area
____ Brine Disposal	____ Proposed	Number of Wells ____
____ Enhanced Recovery		
____ Hydrocarbon Storage		
____ Class III		
____ Other		

Lease Number ____ Well Number ____

Name(s) and Address(es) of New Owner(s)	Name and Address of New Operator

Attach to this application a written agreement between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability betweend them.

The new permittee must show evidence of financial responsibility by the submission of a surety bond, or other adequate assurance, such as financial statements or other materials acceptable to the Director.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed

OMB No. 2040-0042 Approval Expires 4/30/07

EPA

United States Environmental Protection Agency
Washington, DC 20460

Completion Form For Injection Wells

Administrative Information

1. Permittee

Address *(Permanent Mailing Address) (Street, City, and ZIP Code)*

2. Operator

Address *(Street, City, State and ZIP Code)*

3. Facility Name

Telephone Number

Address *(Street, City, State and ZIP Code)*

4. Surface Location Description of Injection Well(s)

State

County

Surface Location Description

____ 1/4 of ____ 1/4 of ____ 1/4 of ____ 1/4 of Section ____ Township ____ Range ____

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location ____ ft. frm (N/S) ____ Line of quarter section
and ____ ft. from (E/W) ____ Line of quarter section.

Well Activity

- ____ Class I
- ____ Class II
  - ____ Brine Disposal
  - ____ Enhanced Recovery
  - ____ Hydrocarbon Storage
- ____ Class III
- ____ Other

Well Status

- ____ Operating
- ____ Modification/Conversion
- ____ Proposed

Type of Permit

- ____ Individual
- ____ Area : Number of Wells ____

Lease Number

Well Number

Submit with this Completion Form the attachments listed in Attachments for Completion Form.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed

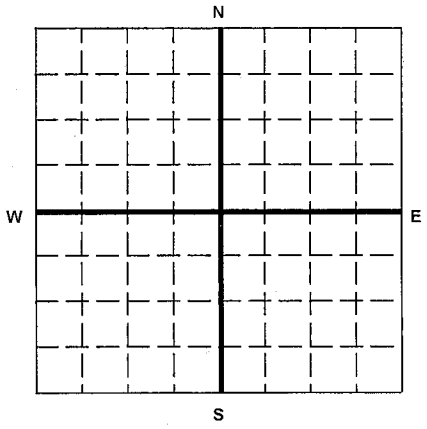
OMB No. 2040-0042 Approval Expires 4/30/07

United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee	Name and Address of Surface Owner

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number

Surface Location Description

____ 1/4 of ____ 1/4 of ____ 1/4 of ____ 1/4 of Section ____ Township ____ Range ____

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location ____ ft. frm (N/S) ____ Line of quarter section and ____ ft. from (E/W) ____ Line of quarter section.

WELL ACTIVITY

- ☐ Brine Disposal
- ☐ Enhanced Recovery
- ☐ Hydrocarbon Storage

TYPE OF PERMIT

- ☐ Individual
- ☐ Area

Number of Wells ____

Lease Name ____ Well Number ____

		INJECTION PRESSURE		TOTAL VOLUME INJECTED		TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG

Certification

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Name and Official Title *(Please type or print)*	Signature	Date Signed

EPA Form 7520-11 (Rev. 8-01)

OMB No. 2040-0042 Approval Expires 4/30/07

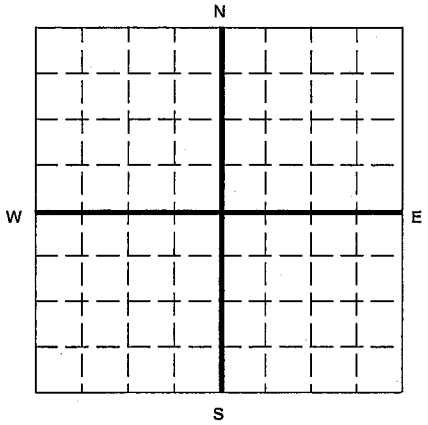
EPA

United States Environmental Protection Agency
Washington, DC 20460

WELL REWORK RECORD

Name and Address of Permittee	Name and Address of Contractor

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number

Surface Location Description

____ 1/4 of ____ 1/4 of ____ 1/4 of ____ 1/4 of Section ____ Township ____ Range ____

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location ____ ft. frm (N/S) ____ Line of quarter section and ____ ft. from (E/W) ____ Line of quarter section.

WELL ACTIVITY	Total Depth Before Rework	TYPE OF PERMIT
☐ Brine Disposal		☐ Individual
☐ Enhanced Recovery	Total Depth After Rework	☐ Area
☐ Hydrocarbon Storage		Number of Wells ____
	Date Rework Commenced	
Lease Name		Well Number
	Date Rework Completed	

WELL CASING RECORD -- BEFORE REWORK

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

WELL CASING RECORD -- AFTER REWORK *(Indicate Additions and Changes Only)*

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

DESCRIBE REWORK OPERATIONS IN DETAIL USE ADDITIONAL SHEETS IF NECESSARY	WIRE LINE LOGS, LIST EACH TYPE	
	Log Types	Logged Intervals

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed

EPA Form 7520-12 (Rev. 8-01)

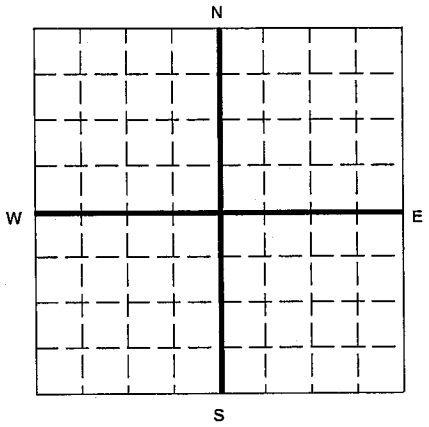
OMB No. 2040-0042 Approval Expires 4/30/07

United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

Name and Address of Facility	Name and Address of Owner/Operator

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number

Surface Location Description

____ 1/4 of ____ 1/4 of ____ 1/4 of ____ 1/4 of Section ____ Township ____ Range ____

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location ____ ft. frm (N/S) ____ Line of quarter section and ____ ft. from (E/W) ____ Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
- ☐ Area Permit
- ☐ Rule

Number of Wells ____

Lease Name

WELL ACTIVITY

- ☐ CLASS I
- ☐ CLASS II
  - ☐ Brine Disposal
  - ☐ Enhanced Recovery
  - ☐ Hydrocarbon Storage
- ☐ CLASS III

Well Number

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☐ The Balance Method
- ☐ The Dump Bailer Method
- ☐ The Two-Plug Method
- ☐ Other

CEMENTING TO PLUG AND ABANDON DATA:	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inche							
Depth to Bottom of Tubing or Drill Pipe (ft							
Sacks of Cement To Be Used (each plug)							
Slurry Volume To Be Pumped (cu. ft.)							
Calculated Top of Plug (ft.)							
Measured Top of Plug (if tagged ft.)							
Slurry Wt. (Lb./Gal.)							
Type Cement or Other Material (Class III)							

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To

Estimated Cost to Plug Wells

Certification

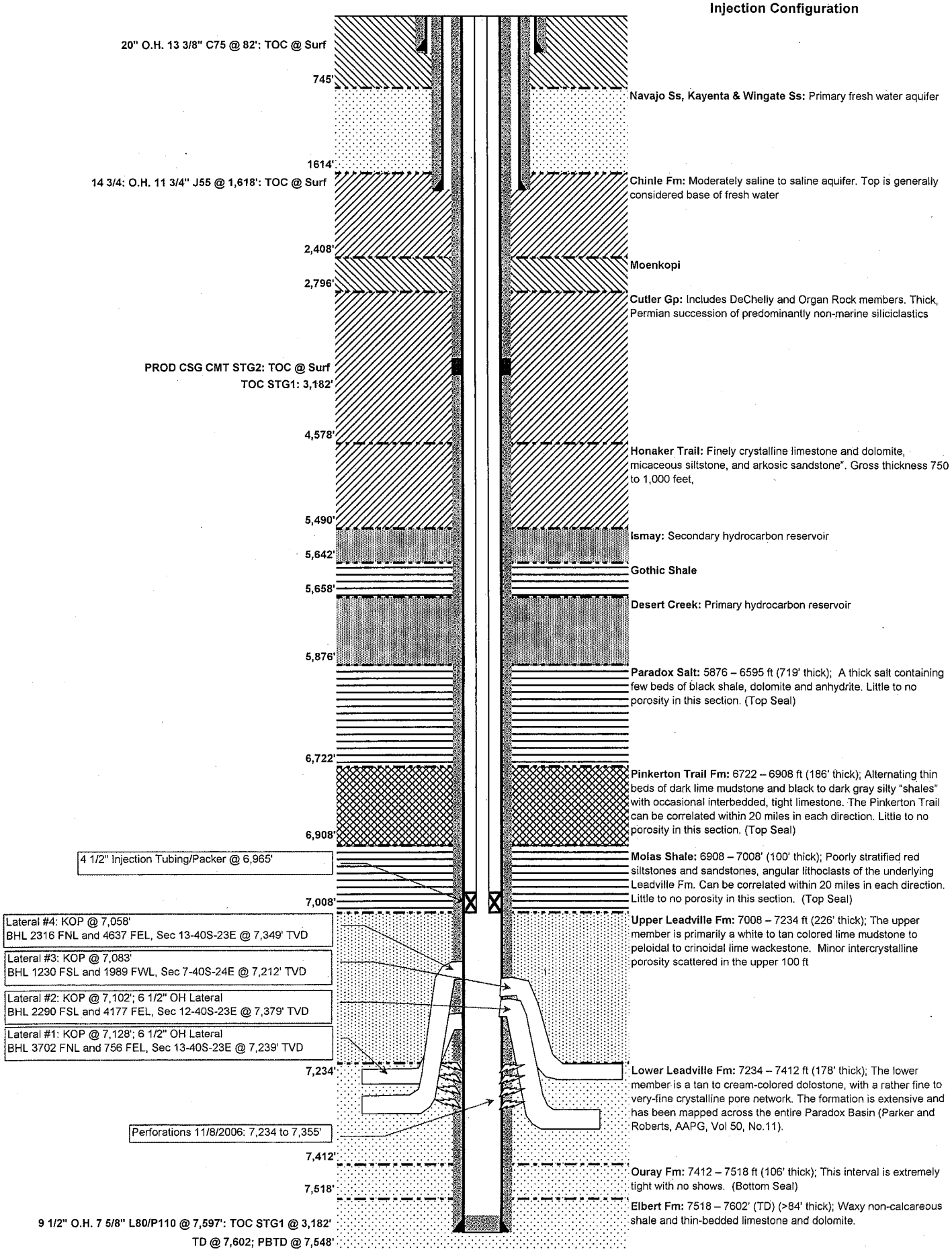
I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possiblity of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed

APPENDIX C – Wellbore Schematic

RESOLUTE
NATURAL RESOURCES

ANETH UNIT C-113 LDVL
740' FNL and 1,665' FEL
Sec. 13, T40S, R23E
San Juan County, UT
Injection Configuration



APPENDIX D – Reference Materials

1. MECHANICAL INTEGRITY TEST (MIT) PART I: REQUIREMENTS FOR INTERNAL TEST

2. REGION 9 UIC PRESSURE FALLOFF REQUIREMENTS

3. REGION 9 STEP RATE TESTING – reference Society of Petroleum Engineers (SPE) Paper #16798, Systematic Design and Analysis of Step-Rate Tests to Determine Formation Parting Pressure

U.S.E.P.A. REGION IX
MECHANICAL INTEGRITY TEST (MIT)
PART I: REQUIREMENTS FOR INTERNAL TEST

The U. S. Environmental Protection Agency (EPA) Region 9 requirements described below are effective as of May 1, 1992. For further reference, consult 40 CFR §146.8(b). Part I MIT may be demonstrated by one of two methods:

METHOD A

1) An annular pressure demonstration is performed at the system's maximum water injection pressure (pressure must be at least 300 psig).
2) The system's wells are tested at least once every five years or whenever packer reseating is needed. A test ensuing from packer reseating will be regarded as an official MIT demonstration.
3) Casing annuli and injections are monitored **monthly** and the results are included in the annual report to the director.

METHOD B

1) Test pressure is to be 1000 psig (it is not necessary to test to maximum water injection pressure).
2) Water injection pressure tests are conducted at least once every three years or whenever packer reseating is needed (see Method A (2)).
3) Casing annuli and injection pressure are monitored **weekly** and the results are included in the annual report to the director.

In applying either Method A or Method B, the operator must adhere to the following EPA specifications:

- All tests must last at least 30 minutes, during which time the pressure should not increase or decrease by more than 5%.
- A minimum differential pressure of 300 psig between tubing and tubing-casing annulus is to be maintained throughout the MIT.
- The EPA will consider alternative test parameters and frequencies when requested in writing. Requirements might be less stringent, for example, where there are no Underground Sources of Drinking Water (USDWs).
- The 30 days minimum notification period specified in federal regulations may be shortened by the EPA Regional Administrator. MIT information will be accepted as valid **only** if EPA has been given at least 14 days notice to make arrangements to witness the MIT.
- If a well fails the MIT, the well is to be shut in immediately and steps for remediation taken as soon as possible. The operator will still be bound to report any noncompliance as required in 40 CFR §144.28(b).
- Remediation may consist of squeeze cementing holes in the casing, running a liner inside the casing, or setting tandem packers to isolate a hole in the casing when it is not practical to squeeze the hole and the hole poses no danger to any USDWs. These and other alternatives will be considered on a case-by-case basis.
- If mechanical integrity is not achieved within the specified time period, the EPA may undertake an enforcement action. Time extensions to achieve compliance are permissible, but they must be justified and requested in writing.