

Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL APT NO. 30 - 039 - 82326
5. Indicate Type of Lease STATE <input type="checkbox"/> FREE <input type="checkbox"/>
6. State Oil & Gas Lease No. E - 1207 - 1
7. Lease Name or Unit Agreement Name NCRA State
8. Well Number #4
9. OGRID Number 225774
10. Pool name or Wildcat Devil's Fork: Gallup & Mesaverde

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-161) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

RESOURCE DEVELOPMENT TECHNOLOGY, LLC (RDT)

3. Address of Operator

PO BOX 1028, MORRISON, CO 80465

4. Well Location

Unit Letter: 'J': 1685' feet from the South line and 1710' feet from the East line

Section: 16 Township: 24 North Range: 6 West NMPM Rio Arriba County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

Pit or Below-grade Tank Application: ☐ or Closure ☐

Pit type: Depth to Groundwater: Distance from nearest fresh water well: Distance from nearest surface water:

Pit Liner Thickness: Soil Below-Grade Tactic Volume: Construction Material:

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: DR

PERFORM REMEDIAL WORK ☒ PLUG AND ABANDON ☒  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☒ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

RDT does desire to Repair the Casing in the subject well which has a potential hole or holes in the casing. RDT desires at all times to leave the Casing in such condition that if the Proposed Casing Repair proves impractical or uneconomic due to mechanical problems that RDT will be in a position to proceed in a timely and economic manner to Plug & Abandon the well in accordance with the guidelines of the NMOC. Therefore, please review this plan with an eye toward insuring that as we work our way out of the hole (initially) we leave the wellbore behind in a properly abandoned condition. The well is cased with 4-1/2" 9.5# J-55 ST&C Casing which was set & cemented on 11/8/1962. The Form C-103 dated 11/29/1962 indicates 10 sq. of cement circulated for the 8-5/8" Surface Casing set on 10/26/1962.

A scaled wellbore diagram with formation tops, perforations and calculated cement tops is attached for the purposes of this filing & to assist in your decision making. The well has a Gallup/Mesaverde Commingling Order #R-4882 & has commingled production since 12/28/1974. The well has cement coverage of the Gallup Fm. from a Calculated 1" Stage Cement Top @ 5242' to TD @ 5851' w/ Gallup Perfs. @ 5647'-5657' & 5762'-5777'. The Calculated 2nd Stage Cement Coverage for the Pictured Cliffs Fm. is from the DV Tool @ 2463' to the Calculated Top @ 2273'. There is a CIBP @ 5720' covering the lower set of perforations. Block squeezing/circulating cementing work in August 1974 cured a casing leak @ 4150' & led to probable cement coverage between squeeze perfs. @ 4853' & the corrosion hole @ 4150'. Productive Mesaverde Perforations were then placed in Mesaverde Sands from 4477' - 4813'. (continued):

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE

*R.A. Schwering*

TITLE Operations Manager

DATE 11/11/2005

Type or print name R.A. Schwering, PE

E-mail address: ras.rdt@mindspring.com

Telephone No.: (303) 716-3200

For State Use Only

APPROVED BY: *H. Villanueva*

TITLE

DATE

Conditions of Approval (if any):

*For P & A Plug Perks Plus*

*Gulp Top 5535'*  
*MV Top 3830'*  
*Chucra top 3120*  
*PG TOP 2280*  
*FC TOP 2115*  
*Rkt Top 1855*  
*QEA Unit top 1785*  
*Wabiment top 920*  
*Surface*

*Plug 5585' to 5485'*  
*Plug 3880' - 3780'*  
*Plug 3190' - 3090'*  
*Plug 2340' - 2240'*  
*Plug 2165' - 2065'*  
*Plug 1905' - 1805'*  
*Plug 1835' - 1735'*  
*Plug 970' - 870'*  
*Plug 300 - 0'*

*inside & outside pipe when needed*

*If By OBL - no cement outside*  
*CSC - Perf + pipe cement outside*

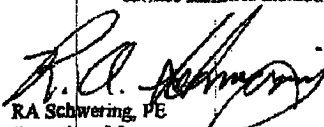
PROPOSED PLAN OF OPERATIONS: Communicate all plans as they change/develop for concurrence by NMOCD.

1. MTRU. NUBOPE. Tag Bottom & Circ. Hole Clean @ PBD w/ 4% KCl Water. POOH w/ Tubing.
2. RU Blue Jet WLS & Run CBL & Mechanical Integrity Logs to evaluate cement coverage and casing condition.
3. Report actual cement coverage to NMOCD & Finalize Well Repair or Abandonment Procedures.
4. RIH w/ Bit & Scraper to PBD & work thru Tight Spots.
5. RU A-Plus WL. Set CIBP @ 4400'.
6. RIH w/ Packer & Isolate Indicated Holes & Pressure Test:
  - a. Determine if there are leaks between Mesaverde TOC Est. @ 4150' & CIBP @ 4400'.
  - b. Squeeze any leaks between Mesaverde TOC @ 4400' under a Retainer.
7. RIH w/ Packer & Isolate Indicated Holes & Pressure Test:
  - a. Determine if Casing with no cement coverage between Mesaverde TOC Est. @ 4150' & Stage Tool @ 2463' has any leaks.
  - b. Design a procedure to cement the void space behind the 4-1/2" casing between the Est. Mesaverde TOC @ 4150' & the Cement Coverage at the DV Tool @ 2463'. INITIAL PLAN:
    - i. Perf. in free pipe above Mesaverde Fm. TOC.
    - ii. Perf. in free pipe immediately below Stage Tool @ 2463'.
    - iii. Set Retainer 100' above perf. above Mesaverde Fm. TOC.
    - iv. Circ annulus between perfs. clean with 4% KCl Water & use returns to calculate necessary cement volume. Mix & pump 150% Excess with Class 'C' Cement.
    - v. Spot 5 sx. cement mixed @ 1.32 Cu. ft./sx. @ 14.8 PPG on Retainer.
  - c. Set a minimum inside plug of 150' Class 'C' Cement (15 sx. @ 1.32 cu. ft./sx. @ 14.8 PPG) from 3877' to 3727' @ TO Mesaverde Fm. unless the preceding step has solved this problem.
8. RIH w/ Packer & Isolate Indicated Holes & Pressure Test:
  - a. Determine if there are leaks between the 2<sup>nd</sup> Stage Pictured Cliffs TOC Calculated @ 2273' & the surface.
  - b. Determine whether to chemically cut-off the 4-1/2" casing at TOC and pull the casing & Run and cement a Tie-Back String OR
  - c. Perforate or use casing holes near the TOC in Free Pipe.
    - i. Set a Retainer 100' above the Holes/Perfs.
    - ii. Circ. the annulus clean to the surface with 4% KCl Water. Determine annular volume based on returns.
    - iii. Cement the 4-1/2" casing to surface with Class 'C' Cement. Dump 5 sx. Class 'C' Cement on Retainer.

TO THE NMOCD: As a Separate Matter please provide all of the NMOCD Required Plugs, Inside & Outside, for this well AS CURRENTLY CONFIGURED in order that it be properly abandoned if necessary.

AT THIS POINT THE WELL WILL THEN HAVE EITHER BEEN PROPERLY P&A'd OR BE READY TO RE-ENTER.

1. Assuming that the well is worth saving then FU Bit & BHA & RIH drilling-out squeezes, retainers & CIBP's. Test to a minimum 500 PSI after each CIBP, Cement Plug or Retainer is drilled out above the CIBP @ 4400'. Test the well for fluid entry prior to drilling-out the CIBP @ 4400'.
2. Drill-out the CIBP @ 4400' after obtaining wellbore integrity to 4400'.
3. Evaluate the Upper Gallup/Mesaverde Zones for clean-up stimulations/productivity. Stimulate as needed.
4. Drill-out the CIBP @ 5720' & past the Insert Float Collar @ 5786' & Cement/Fill to old PBD @ 5828'. POOH.
5. Round-trip scraper to PBD. Circ. clean while on-bottom if possible.
6. RIH w/ Packer & Evaluate Lower Gallup Perfs. (5762' - 5777') for clean-up stimulation/productivity. Stimulate as needed.
7. POOH & LD Packer. RIH w/ Tubing & Land Sumps. Swab well to Clean-Up. Run Pump & Rods. Finish reconstructing surface facilities including on-lease gas line to Enterprise Gas Line. Resume Production.

  
RA Schwering, PE  
Operations Manager  
RESOURCE DEVELOPMENT TECHNOLOGY, LLC  
PHONE: (303) 716-3200  
FAX: (303) 716-5780  
Cell: (303) 919-6826  
NM Cell: (505) 947-3072

# Cement/Casing Details

# Depth

# Perforations/Casing Tools

# Top

# Surface

Cement: 150 cu. ft. @ 14' 7 1/2" dia  
 Circ. 100 cu. ft. @ surface  
 18 1/4" Hdx x 8 5/8" ID @ 2 1/4" KB  
 Set @ 2 1/4" KB

12 1/2' Hdx

1000'

- Djo Hdw - 1700'

- Kirtland - 1950'

- Fort Hall - 2090'

- Adams Cliff - 2288'

- Lewis Shale - 2380'

Calc TOC 2273

2nd Stage 1962 2000'  
 50 cu. 50/50 Pbz A' Class H  
 Cont. w/ 2 1/2" Bcl  
 Calc. TOC = 2273'

1st Stage Tool @ 2463'

3000'

- Chisum - 3118'

- Monksville Shale - 3750'

- Cliff House - 3880'

- Menace - 3870'

4000'

1. Circ. Cont. 5/4253' to 4150'
2. 125 cu. Class H' Cont. w/ FLA Hdx  
 100 cu. Class H' Cont. w/ 2 1/2" Bcl
3. 50 cu. Class H' Cont. w/ 2 1/2" Bcl
4. 50 cu. Class H' Cont. w/ 2 1/2" Bcl
5. 50 cu. Class H' Cont. w/ 2 1/2" Bcl
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100. 50 cu. Class H' Cont. w/ 2 1/2" Bcl

Monksville Pkgs: 4470' - 4480'  
 4501' - 4504'  
 4531' - 4541'

- Ft. Laramie - 4555'

Ph. Lakroot Pkgs: 4773' - 4813'

- Mancos - 4822'

Calc TOC 5242

Calc TOC 5242

1st Stage 1962  
 120 cu. 50/50 Pbz A' Class H  
 Cement w/ 2 1/2" Bcl

M. Gallup Pkgs: 5677' - 5687'  
 5720' - 5720'  
 M. Gallup Pkgs: 5721' - 5729'  
 5786' - 5786'

- Gallup - 5564'

Set 4 1/2" 9.5 T-55 STC Cement  
 @ 5051' T.D.

Cast Iron BP 5720

NCRA State #4 Wellbore  
 Vertically Sealed