

DATE IN 7/20/06	SUSPENSE 8/16/06	ENGINEER WILL JONES	LOGGED IN 7/21/06	TYPE SWD	APP NO. PTD50620248953
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] **[NSP-Non-Standard Proration Unit]** **[SD-Simultaneous Dedication]**
[DHC-Downhole Commingling] **[CTB-Lease Commingling]** **[PLC-Pool/Lease Commingling]**
[PC-Pool Commingling] **[OLS - Off-Lease Storage]** **[OLM-Off-Lease Measurement]**
[WFX-Waterflood Expansion] **[PMX-Pressure Maintenance Expansion]**
[SWD-Salt Water Disposal] **[IPI-Injection Pressure Increase]**
[EOR-Qualified Enhanced Oil Recovery Certification] **[PPR-Positive Production Response]**

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners
 [B] ☐ Offset Operators, Leaseholders or Surface Owner
 [C] ☐ Application is One Which Requires Published Legal Notice
 [D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
 [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
 [F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name

Signature

Title

Date

e-mail Address



Certified Mail 7005 1820 0002 8596 1482

July 18, 2006

Will Jones
NMOCD
1220 S. St. Francis St.
Santa Fe, NM 87505

SUBJECT: PRETTY LADY 30-11-34 NO. 1 AMENDMENT TO SWD PERMIT

Dear Mr. Jones:

Merrion Oil & Gas proposes to permit the Mesaverde zone for injection in the subject wellbore. We are not certain whether we will complete the previously approved Morrison and Entrada zones in addition to the Mesaverde. We propose to test the Mesaverde and see if it will take sufficient volume to meet our disposal needs. If it is insufficient, we would complete the two deeper zones for injection as well. The information required for your evaluation of the Mesaverde portion of the project is attached.

If you have questions about this project, please call me at 505.324.5326 or email me at cdinning@merrion.bz.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Dinning", with a large, stylized flourish extending from the end of the signature.

Connie S. Dinning
Production Engineer

Enclosures

csd

Cc: NMOCD Aztec Office, Well File

2006 JUL 20 PM 1 12

(SWD-1034)

Proposed Amendment to SWD-1034 for Pretty Lady 20-11-34 No. 1 (API# 30-045-30922) Add Mesaverde as an injection zone.

Items I – V: No Change

Item VI : The Martin 34 No., a Dakota completion, is the only well that penetrates the Mesaverde within the ½ mile radius area of review. Data about this well was taken from the NMOCD website. A wellbore schematic is attached. The well was drilled in 1961. It had holes in the casing, but they were squeezed and pressure tested to 1500 psi. The Mesaverde was isolated by the first squeezes in 1969. The shallow zones were isolated by a squeeze job in 1971. ConocoPhillips ran a liner in 2000 to further isolate the Mesaverde.

Item VII – IX: Data summaries for these sections regarding the Mesaverde are attached as is a wellbore diagram.

Item X: Logs are on file with the NMOCD

Item XI: No change from original permit application

Item XII: No change in affirmative statement

Item XIII: Proof of Notice for Mesaverde attached.

Item XIV: Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Connie Dinning Title: Production Engineer

SIGNATURE:  DATE: 7/18/06

E-MAIL ADDRESS: cdinning@merrion.bz

Wellbore Schematic

Martin 34 No. 2 (Operated by Conoco Phillips)

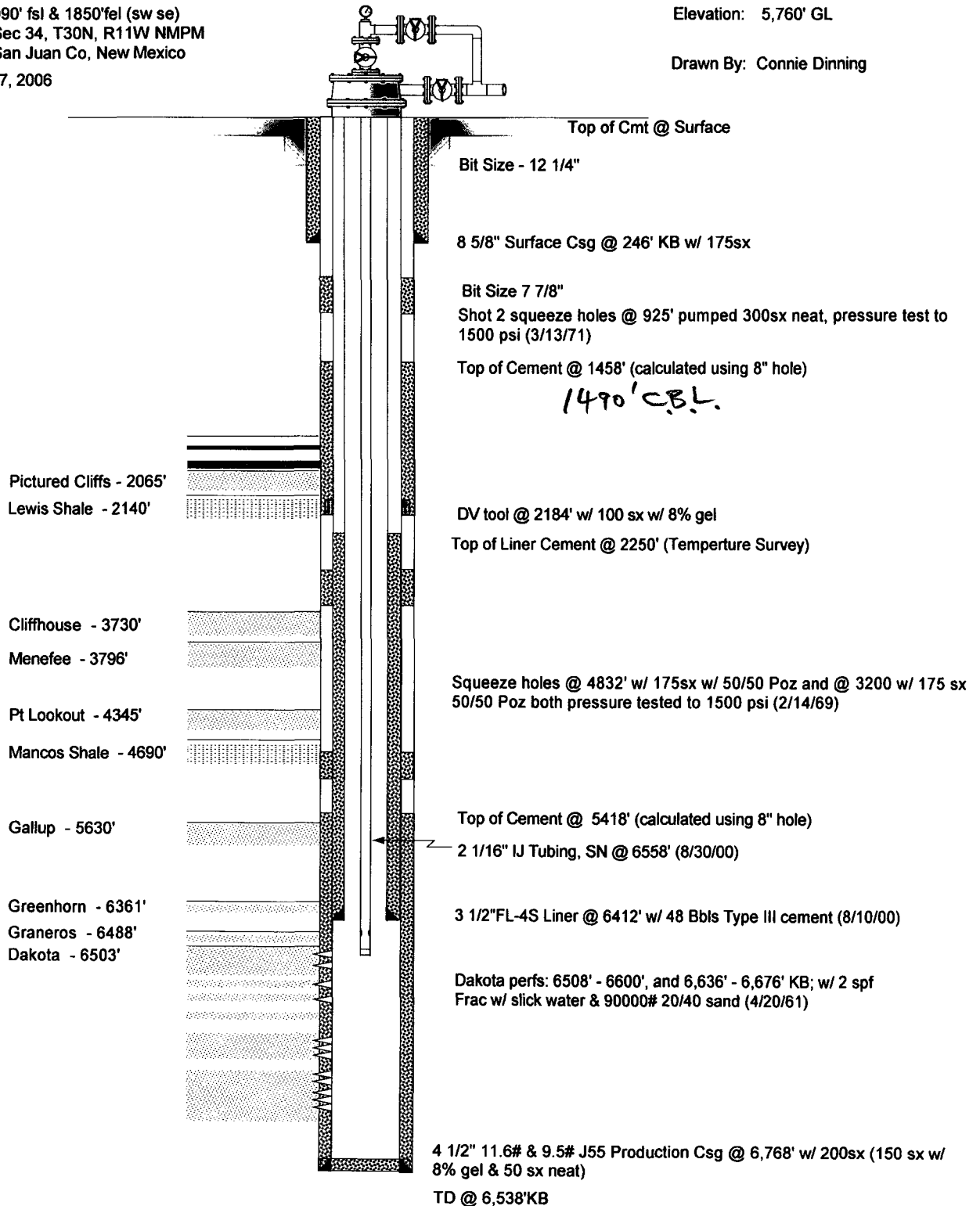
Current Wellbore Configuration, Data from NMOCD website

Location: 990' fsl & 1850'fel (sw se)
Sec 34, T30N, R11W NMPM
San Juan Co, New Mexico

Date : July 17, 2006

Elevation: 5,760' GL

Drawn By: Connie Dinning



SPUD: Mar 21, 1961
COMPLETED: Apr 5, 1961

Pretty Lady 30 11 34, Salt Water Disposal Well

Amendedment to original permit application to add Mesaverde

VII.

- 1) Ave Rate: **10000 BPD** Max Daily Rate: **12000 BPD**
- 2) Ave. Pressure: **800** Max Pressure: **828 psi**
- 3) Annular Fluid: Packer fluid consisting of filming corrosion inhibitor and oxygen scavenger
- 4) Injection Fluid Analysis, No change from original application
- 5) Disposal Zone Water Data.
More information is provided in the geological summary of this package, but according to the Four Corners Geological Society Guidebook, and analysis from MOG producing wells, the salinity of the Mesaverde in the area should not be less than 20,000 ppm TDS.

Merrion Oil & Gas Corp.
Wellbore Schematic
Pretty Lady 30-11-34
Proposed Wellbore Configuration

Location: 1760' fsl & 1475' fel (nw se)
 Sec 34, T30N, R11W, NMPM
 San Juan Co, New Mexico

Prepared: July 17, 2006

Elevation: 5789' GL
 5802' RKB

Injection Zone: Mesaverde

Prepared by: Connie Dinning

Tertiary

Ojo Alamo - 755'
 Kirtland Shale - 899'
 Fruitland Coal - 1793'
 Pictured Cliffs - 2102'

Cretaceous

Mesaverde - 3762'

Dakota - 6521'

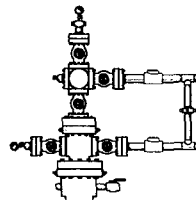
Jurassic

Entrada - 7641'

Penn, Permian, Triassic

Rico - 10,468'

Paradox - 11,432'



13-3/8" 48-ppf STC H-40 Surface Csg @ 433"KB w/ 500-sx

5 1/2", 15.5# plastic lined tubing landed in RCP w/ on/off tool @ +/-3700'

Mesaverde Perfs: 3762' - 3830', 3 spf

Morrison/Entrada Perfs: 7384' - 7815', 3 spf

9-5/8" 47 & 53-ppf LTC P-100 Csg @ 8104"KB w/ 2300-sx
 Cement plug 3 - 7949 - 8154' w/ 84-cuft

Cement plug 2 - 10382 - 10518' w/ 81.4-cuft

Cement plug 1 - 11276 - 11482' w/ 81.4-cuft

TD @ 12,551' KB

Merrion Oil & Gas

Pretty Lady 30-11-34 Proposed Stimulation Procedure for Mesaverde

The subject well will be stimulated in a single stage with a spearhead of 1500 gal of 15% HCL and frac'd w/ slick water and 20/40 mesh sand as follows:

Pad Stg 1	25000 gal slick water	No Sand
Stg 2	20000 gal slick water	0.5 ppg
Stg 3	20000 gal slick water	1.0 ppg
Stg 4	60000 gal slick water	2.0 ppg
Flush Stg 6	1927 gal slick water	No Sand

Total – 126,927 Bbls Fluid 120,000 # proppant at 60 BPM

The detail design may vary depending upon frac string size, etc.

Merrion Oil & Gas

VIII. Mesaverde Geological Information for Amended SWD Permit

A. The proposed injection zone is the Mesaverde (MV)

The section of the MV (Cliffhouse) of interest for the proposed SWD well is a transgressive sandstone.

The Blanco MV pool lies to the northeast of the proposed SWD well. It ranges from 700' to 1100' thick, and it consists of sandstones, shales and coals. The porosity is 10% to 16% with a water saturation of 30% to 40%. The salinity varies greatly through the pool. The Crouch Mesa MV pool to the southwest has a water salinity of around 38,800 TDS. MOG has Mesaverde producing wells in section 5, T29N, R11W with a TDS of 24,000 ppm and in section 36 of T30N, R12W with a TDS of 33,900 ppm. This indicates that the Mesaverde in this area has high salinity, and would be a good candidate for SWD.

The nearest MV production is from the Blanco MV pool. According to Dwight's data, there are no MV producers in Sections 33, 34, or 35 of T30N, R11W. There is one ConocoPhillips MV to the south in Section 1 of 29N and 11W. There are some Burlington (now ConocoPhillips) MV producers to the north in 26, 27 and 28 of 30N and 11W. These are all about a mile away from the proposed disposal well. No interference has been noted in the Blanco MV wells from the existing SWD well in section 3 of T29N and R11W.

B. Water Bearing Zones

- a. Underlying the Proposed Injection Zones: There are no known fresh water formations underlying the injection zone. Zones below the Morrison and Entrada were discussed in the original SWD application. The Dakota formation lies below the Mesaverde, and above the Morrison. Basin Dakota salinity varies, but it is generally no lower than 17,000 ppm TDS.
- b. Overlying the Proposed Injection Zones: All overlying zones were discussed in the original permit application.

PUBLIC NOTICE

Merrion Oil & Gas
610 Reilly Avenue
Farmington, NM 87401
Attn: Connie Dinning

Merrion Oil & Gas proposes to amend plans to install commercial produced water disposal facilities at the Pretty Lady 30-11-34 No. 1 to include the Mesaverde formation.

The facility will dispose of

Legal Notices

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produced water by off loading into closed top tanks and injecting into the Pretty Lady 30-11-34 No. 1

Well Location: 1760' fsl & 1475' fsl, Section 34, T30N, R11W, San Juan County, NM

Formation Name & Depth: Mesaverde, 3762' - 3830' and Morrison/Entrada, 7384' - 7815'

Max Injection Rate: 12,000 BWPD

Max Injection Pressure: 827 psi

Interested parties must file objections or requests for a hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days of this notice.

Legal No. 53755 published in The Daily Times, Farmington, New Mexico on Sunday, July 16, 2006.

FAX 334-6170

C104AReport

Page 1 of 1

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone: (505) 334-6170 Fax: (505) 334-6170

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-145
Permit 35391

Change of Operator

Previous Operator Information

OGRID: 14538
Name: BURLINGTON RESOURCES OIL
& GAS COMPANY LP
Address: 3401 E. 30TH STREET
Address:
City, State, Zip: FARMINGTON, NM 87402

New Operator Information

Effective Date: 8/2/2006
OGRID: 14634
Name: MERRION OIL & GAS CORP
Address: 610 REILLY AVE
Address:
City, State, Zip: FARMINGTON, NM 874012634

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the certified list of wells is true to the best of my knowledge and belief.

Previous Operator

Signature: Juanita Farrell
Printed Name: Juanita Farrell
Title: Regulatory Analyst
Date: 8/2/06 Phone: 505 326 9597

New Operator

Signature: George Sharpe
Printed Name: George Sharpe
Title: Manager, Oil & Gas Investments
Date: 8-2-06 Phone: 505-324-5300

PRETTY LAKE
API # 30-015
T30N-R11W-Sec 34: NWSE
SAN JUAN COUNTY, NM

NMOCD Approval

Electronic Signature: Charlie Perrin, District 3
Date: August 15, 2006

Jones, William V., EMNRD

From: Connie Dinning [cdinning9804@qwest.net]
Sent: Tuesday, August 15, 2006 3:33 PM
To: Jones, William V., EMNRD
Cc: 'Steve Dunn'
Subject: RE: Change to SWD Permit

Just called Charlie, and he said he would approve it, but he didn't say when.
Thanks
CSD

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Tuesday, August 15, 2006 3:21 PM
To: Connie Dinning
Subject: RE: Change to SWD Permit

Hello Connie:
Would you give me an estimate of when Merrion will get the Change of Operator done?

Regards,

William V. Jones Engineering Bureau Oil Conservation Division Santa Fe

From: Jones, William V., EMNRD
Sent: Tuesday, August 01, 2006 1:38 PM
To: 'Connie Dinning'
Subject: RE: Change to SWD Permit

Hey Connie:
Thanks for that - having trouble printing the picture from WORD but that is typical here. If you have it as a TIF or other picture file, that would be easier.

I understand that Merrion still needs to get the operator change processed - the attorneys here are saying that needs to be done prior to granting a permit, due to the new Rule 40 issues.

Catanach is the pressure increase person, but we have rarely extrapolated data from one well to the other unless in a waterflood.

I hope you get a copy of the mudlog from the previous operators. A shame that a well this deep cannot have an injection interval deeper than the Cliff House. Steve Hayden may have some ideas?

Have a nice week,

William V. Jones Engineering Bureau Oil Conservation Division Santa Fe

From: Connie Dinning [mailto:cdinning9804@qwest.net]
Sent: Monday, July 31, 2006 4:36 PM
To: Jones, William V., EMNRD

8/15/2006

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Thursday, July 27, 2006 1:32 PM
To: 'Connie Dinning'
Cc: Hayden, Steven, EMNRD
Subject: RE: Change to SWD Permit

*received
8/1/06
NOTED 7/20/06*

Hello Connie Dinning:

We received your request to amend SWD-1034 by adding the Cliff House interval of the Mesaverde in the Pretty Lady 30-11-34 No. 1 and have the following comments.

We received the newspaper notice, but not the proof of notice to ConocoPhillips, the landowner, or other affected parties as defined in rule 701B2 (our version of this rule on the Web is being corrected today to include lessees if no operator exists and mineral owners if no lessee exists.) To complete the required notice, send us copies of the proofs.

The proposed Cliff House interval is the same as is being used in Basin Disposal Inc's Disposal #1 located about 4400 feet southwest. They have submitted requests to increase the injection pressure. Our Division inspectors in Aztec are available to talk about any issues with that well if any. The amended permit will likely require a swab test and water sample specifically from the Cliff House. Also as you know the surface injection pressure limit will be reduced by moving your top perforation up the hole - unless and until you establish a higher pressure limit by running a Step Rate Test.

Regards,

William V. Jones

Engineering Bureau

Oil Conservation Division

Santa Fe

need Mention "Change of Operator"

7/27/2006

ing services (for an ex

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

3. Article Addressed to:
Energen Resources
2198 Bloomfield Highway
Farmington, NM 87401

4a. Article Number
7006 0100 0005 2529 7536

4b. Service Type
☐ Registered
☒ Express Mail
☐ Return Receipt for Merchandise
☐ COD

7. Date of Delivery
07/19/06

8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name)
F. Chavez

6. Signature (Addressee or Agent)
F. Chavez

PS Form 3811, December 1994

Is your RETURN ADDRESS completed on the reverse side?

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

3. Article Addressed to:
Energen Resources
2198 Bloomfield Highway
Farmington, NM 87401

4a. Article Number
7006 0100 0005 2529 7536

4b. Service Type
☐ Registered
☒ Express Mail
☐ Return Receipt for Merchandise
☐ COD

7. Date of Delivery
07/19/06

8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name)
F. Chavez

6. Signature (Addressee or Agent)
F. Chavez

PS Form 3811, December 1994

ing services (for an ex

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

3. Article Addressed to:
Lee M. Crane
P. O. Box 516
Aztec, NM 87410

4a. Article Number
7006 0100 0005 2529

4b. Service Type
☐ Registered
☒ Express Mail
☐ Return Receipt for Merchandise
☐ COD

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name)
A. KENDRICK

6. Signature (Addressee or Agent)
A. Kendrick

PS Form 3811, December 1994

Is your RETURN ADDRESS completed on the reverse side?

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

3. Article Addressed to:
Jakie Moss
P. O. Box 143
Flora Vista, NM 87415

4a. Article Number
7006 0100 0005 2529 7512

4b. Service Type
☐ Registered
☒ Express Mail
☐ Return Receipt for Merchandise
☐ COD

7. Date of Delivery
7-20-06

8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name)
Mary Ann Moss

6. Signature (Addressee or Agent)
Mary Ann Moss

PS Form 3811, December 1994