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NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]

[DD-Directional Drilling] [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]

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| | [A] | Working | g, Royalty o | r Overridin | g Royalty | Interest Ov | vners | |
| | [B] | Offset C | perators, L | easeholders | or Surface | e Owner | | |
| | [C] | Applica | tion is One | Which Requ | ires Publi | ished Legal | Notice | |
| | [D] | | tion and/or tureau of Land Ma | | | • | | |
| | [E] | For all o | of the above | , Proof of N | otification | or Publica | ation is Attach | ned, and/or, |
| | [F] [| ☐ Waivers | are Attache | ed | | | | |

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

JAMES BRUCE P.O. BOX 1056 SANTA FE, NM 87504

Print or Type Name

Signature

Alfaney to Applicant

Date

APPLICATION FOR AUTHORIZATION TO INJECT

| ∨ I. | PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? Yes No |
|--------------------|--|
| VII. | OPERATOR: Mallon Oil Company Suite 1700, 999 18th Street, Denver, Colorado 80202 |
| | ADDRESS: |
| | CONTACT PARTY: Ray E. Jones (303) PHONE: 293-2333 |
| VIII. | WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. Additional sheets may be attached if necessary. |
| VIV. | Is this an expansion of an existing project: Yes X No If yes, give the Division order number authorizing the project |
| <i>.</i> V. | Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. |
| ∨VI. | Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. |
| V VII. | Attach data on the proposed operation, including: |
| | Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). |
| ∕∗∨ш. | Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/1 or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. |
| V IX. | Describe the proposed stimulation program, if any. |
| * X. | Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.) |
| /* XI. | Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. |
| XII. | Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water. |
| хш. | Applicants must complete the "Proof of Notice" section on the reverse side of this form. |
| 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: Ray E. Jones TITLE: V.P Engineering |
| | SIGNATURE: Lay Date: 25 oct 99 |
| * | If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal. |
| | · |

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township, and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge piugs used to seal off such perforations.
 - (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location. (Notice letter attached)

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(TO' BE SUBMITTED LATER)

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, PO Box 2088, Santa Fe, NM 87504-2088 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Form C-108 Attachment

MALLON OIL COMPANY

M # 30-025-32785

MALLON 34 FEDERAL NO. 8 1980' FSL & 1980' FEL, Unit J Sec. 34, T19S, R34E Lea County, NM

III. Injection Well Data:

Surface Casing: Hole size: 14-3/4" and 13-1/2", Casing: 9-5/8" @ 1510'

Cemented: 850 sx, circ to surface

Intermediate Casing: Hole size: 8-3/4", Casing: 5-1/2" @ 6296'

Cemented: 650 sx, circulated to surface

Total Depth: 6300'

Tubing: 2-7/8" tubing with packer at 5550'

Name of Injection Formation: Delaware

Field: Lea, NE

Injection Interval: Cased hole, 5645'-5930', gross interval

Original Well Purpose: The well was drilled by Mallon Oil Company in 1995 and

completed as a Delaware producer

Perforated Intervals: 5645' – 5665'

5772' - 5806' CIBP @ 5872 5884' - 5908'

Depth and name of overlying and/or

underlying oil and gas zones in this area: Grayburg 5586' San Andres 5931'

Delaware is also expected below the San Andres in this area but the well was not drilled through the San Andres.

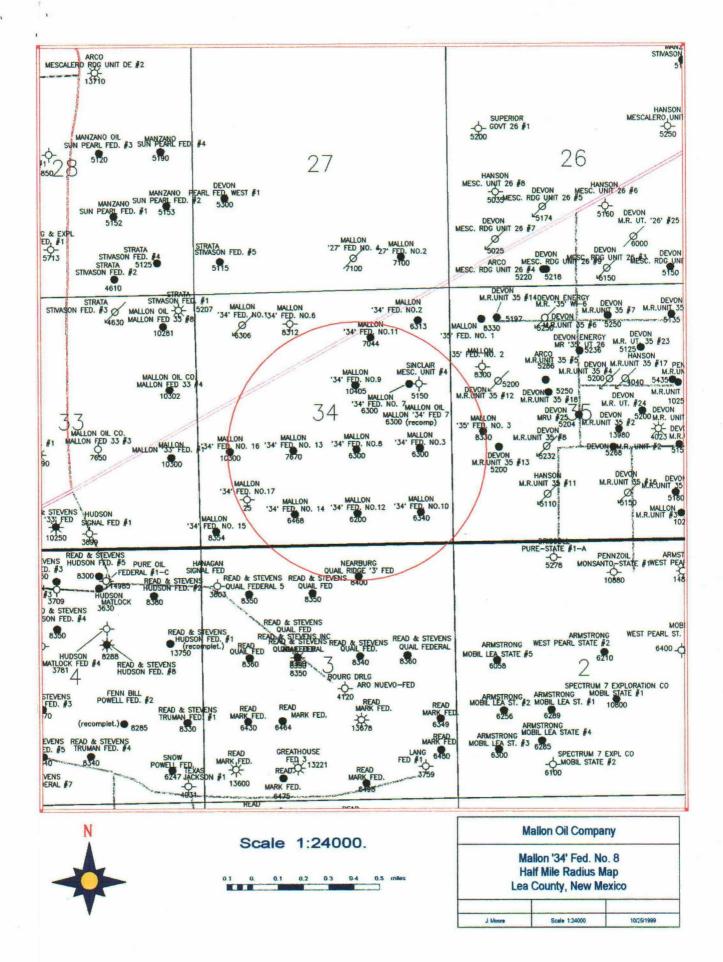
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VI. Tabulation of Data on all Wells in Review Area

Well: Mallon 34 Federal No. 3

Location: 1980' FNL & 660' FEL, Unit I, Sec. 34 T19S-R34E, Lea County, NM

<u>Depth</u>: 6300'

Type Well: Oil producer

Construction: 9-5/8" @ 1535' w/ 800sx - circ

5-1/2" @ 6300' w/ 1250 sx, cement top 860' from surface by acoustic cement log

DV Tool @ 4984'

Date Drilled: 10/2/94 to 10/19/94

Record of Completion: 5842'-5882' Delaware Perforations

6245' CIBP

6250' San Andres Perforation

Well: Mallon 34 Federal No. 7

Location: 1980' FNL & 860' FEL, Unit H, Sec. 34 T19S-R34E, Lea County, NM

<u>Depth</u>: 6300'

Type Well: Oil producer

Construction: 9-5/8" @ 1512' w/ 850 sx circ

5-1/2" @ 6300' w/ 1550 sx circ

DV Tool @ 5452'

<u>Date Drilled</u>: 2/10/95 to 3/3/95

Record of Completion: 5094'-5104', 5236'-5244' Grayburg Perforations

5400' CIBP

5926'-5936', 5966'-5994', 5846'-5880' Delaware Perforations

Mallon 34 Fed No. 8 Form C-108 Attachment Oct. 25, 1999 Page 3

Well: Mallon 34 Federal No. 9

Location: 1980' FNL & 1980' FEL, Unit G, Sec. 34 T19S-R34E, Lea County, NM

<u>Depth</u>: 10405'

Type Well: Oil producer

Construction: 9-5/8" @ 1502' w/ 875 sx -circ

5-1/2" @ 10395' w/ 3190 sx - circ

DV Tool @ 7600'

<u>Date Drilled</u>: 4/11/95 to 5/22/95

Record of Completion: 5816'-5826', 5874'-5894', 6426'-6436' Delaware Perforations

6560'-6580'

6900' CIBP

7466'-7476' Delaware Perforations

Well: Mallon 34 Federal No. 10

Location: 660' FSL & 660' FEL, Unit P, Sec. 34 T19S-R34E, Lea County, NM

Depth: 6340'

Type Well: Oil producer

<u>Construction</u>: 9-5/8" @ 1508' w/ 850sx - circ

5-1/2" @ 6306' w/ 1615 sx -circ

Date Drilled: 3/3/95 to 3/23/95

Record of Completion: 5580'-5594', 5608'-5628', 5730'-5750' Delaware Perforations

5764'-5784', 6032'-6052', 6057'-6077'

Mallon 34 Fec. No. 8 Form C-108 Attachment Oct. 25, 1999 Page 4

Well: Mallon 34 Federal No. 11

Location: 990' FNL & 1650' FEL, Unit B, Sec. 34 T19S-R34E, Lea County, NM

<u>Depth</u>: 7044'

Type Well: Oil producer

Construction: 9-5/8" @ 1510' w/ 875sx - circ

5-1/2" @ 7044' w/ 980 sx, cement top @ 3060' by temperature log.

Date Drilled: 5/8/96 to 6/2/96

Record of Completion: 5782'-5792', 5844'-5854', 5930'-5946' Delaware Perforations

6710' CIBP

6810'-6816' Delaware Perforations

Well: Mallon 34 Federal No. 12

Location: 660' FSL & 1980' FEL, Unit O, Sec. 34 T19S-R34E, Lea County, NM

<u>Depth</u>: 6200'

Type Well: Oil producer

Construction: 9-5/8" @ 1513' w/ 650sx - circ

5-1/2" @ 6200' w/ 1190 sx, cmt top @ 1350' by temperature log.

DV Tool @ 4841'

<u>Date Drilled</u>: 12/28/94 to 1/18/95

Record of Completion: 5664'-5692', 5725'-5738', 5741'-5744' Delaware Perforations

5780'-5796', 5816'-5832', 5884'-5916'

Mallon 34 Feg. No. 8 Form C-108 Attachment Oct. 25, 1999 Page 5

Well: Mallon 34 Federal No. 13

Location: 1980' FSL & 1980' FWL, Unit K, Sec. 34 T19S-R34E, Lea County, NM

Depth: 7670'

Type Well: Oil producer

Construction: 9-5/8" @ 1512' w/ 875 sx - circ

5-1/2" @ 7665' w/ 628 sx, cement top at 3730' by temperature log.

<u>Date Drilled</u>: 3/26/95 to 4/13/95 and 12/01/95 to 12/08/95

Record of Completion: 5758'-5778' Delaware Perforations

Well: Mallon 34 Federal No. 14

Location: 660' FSL & 1980' FWL, Unit N, Sec. 34 T19S-R34E, Lea County, NM

<u>Depth</u>: 6468'

Type Well: Oil producer

Construction: 9-5/8" @ 1489' w/ 850sx - circ

5-1/2" @ 6468' w/ 1450 sx - circ

<u>Date Drilled</u>: 2/27/95 to 3/17/95

Record of Completion: 5658'-5680', 5702'-5722', 5800'-5808' Delaware Perforations

5816'-5836', 5842'-5852', 5854'-5858'

6210' CIBP

6271-6281' San Andres Perforations

Mallon 34 Fec. No. 8 Form C-108 Attachment

Oct. 25, 1999 Page 6

Well: Mallon 34 Federal No. 16

Location: 1980' FSL & 660' FWL, Unit L, Sec. 34 T19S-R34E, Lea County, NM

<u>Depth</u>: 10,300'

Type Well: Oil producer

Construction 9-5/8" @ 1485' w/ 850sx, cement top @ 28' by temperature log.

5-1/2" @ 10300' w/ 2575 sx, cement top @ 2110' by temperature log.

DV Tool @ 2757'

Date Drilled: 11/8/96 to 12/03/96 and 7/21/97 to 8/4/97

Record of Completion: 10144'-10164' Bone Spring Perforations

Well: Mallon 34 Federal No. 17

Location: 990' FSL & 990' FWL, Unit M, Sec 34 T19S-R34E, Lea County, NM

Depth: 40'

Type Well: D&A

Construction: 16" @ 40' conductor, cemented to surface

Date Drilled: 5/31/96

Record of Completion: N.A.

Mallon 34 Fed. No. 8 Form C-108 Attachment Oct. 25, 1999 Page 7

Well: Mescalero Ridge Unit No. 4

Location: 1980' FNL & 660' FEL, Unit H, Sec. 34 T19S-R34E, Lea County, NM

<u>Depth</u>: 5,150'

Type Well: D&A

<u>Construction</u>: 8-5/8" @ 200', 100 sx - circ

Date Drilled: 6/10/66 to 6/23/66

Record of Completion: N.A.

Well: Quail Ridge 3 Federal No. 1

Location: 660' FNL & 1980' FEL, Unit B, Sec. 3 T20S-R34E, Lea County, NM

<u>Depth</u>: 8,400'

Type Well: Oil producer

Construction: 13-3/8" @ 1520' w/ 1234sx - circ

5-1/2" @ 8400' w/ 5250 sx - circ

<u>Date Drilled</u>: 9/20/95 to 10/17/95

Record of Completion: 8126'-8241.5' Delaware Perforations

Mallon 34 Fecl. No. 8 Form C-108 Attachment Oct. 25, 1999 Page 8

Well: Mallon 35 Federal No. 3

Location: 2310' FSL & 660' FWL, Unit L, Sec 35 T19S-R34E, Lea County, NM

Depth: 8330'

Type Well: Oil producer

<u>Construction</u>: 9-5/8" @ 1502' w/ 1050 sx - circ

5-1/2" @ 8330' w/ 2755 sx , cement top @ 1132' by calculation

DV Tool @ 6474'

<u>Date Drilled</u>: 1/19/97 to 2/09/97

Record of Completion: 5719'-5723', 5766'-5772', 5792'-5810' Delaware Perforations

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| ! | V | | | | | , | | : | | |
| | 10 | | <u> </u> | | | | | | | |
| | (] | 4 | \ | | | | , | | | ! |
| | P | | .(| | 6300' | 8¾" | 5%" | | 1555 s | X |
| | P | |) | | | 71/3" | : | | CIRC.7 | |
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ENGINEERING CHART

SUBJECT MALLON 34 FEDERAL NO. 9

SHEET NO.

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| | V 0 | | 1502' 143/4" | |
| | 70 | $H \sim$ | | CIRC. TO |
| | 12 | | | SURFACE |
| | | | 5766' 27/8" TUBING | , |
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| 1000 GAL. | A | ₽ 4 | 5816-5826' DELAWARE | PERFORATIONS |
| 150,000 # | | - 6 d | | : |
| 20/40 SAND | 4 | 0 4 | 5874-5894 DELAWARE | PERFORATIONS |
| | | | | |
| 1000 GAL. | 19 | | (101 (105 DE) 1110 | - 0-0-004-1016 |
| 50,000# | | [6] A | 6426-6436' DELAWARE | PERFORATIONS |
| | - | 6 | 6560-6580' DELAWARE | PEDEODATIONS |
| 1000 GAL 105,000# | -/7 | | 6360 6300 DELAWARE | - I LIT ONATIONS |
| 20/40 SAND | 14 | | | |
| | Δ | 4 | | |
| | 6 | | | |
| | | | 6900' CIBP | |
| | 10 | | | |
| | D | 80 | 7466-7476' DELAWAF | RE PERFORATIONS |
| | 14 | | 10.00=/ 03/ | FIL! |
| | 1 | | 10,395' 83/4" | 5½ 3190 sx |
| | <u>V</u> | \sim | <u> </u> | CIRC. TO |
| | 101 | 05'TD | | SURFACE |
| | 10,4 | | | |

ENGINEERING CHART

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| SUBJECT | MALLON | 34 | FEL | DERA | L NO. | 10 | |
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SHEET NO.

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| | 4 | | | · · · · · · · · · · · · · · · · · · · | : | | : |
| | 1 | | | 1508' | 143/4" | 95/0" | 850 sx |
| /= | | 11 7 | | 1508 | 1474 | 178 | CIRC. TO |
| | 70 | 11/4 | | · · · · · · · · · · · · · · · · · · · | | | SURFACE |
| : | | [4] | | | | | |
| | A | | | | , | | |
| 1000 GAL. | 10 | P V | 5580 | -5594 | DELAWA | RE PER | FORATIONS |
| ACID | V | | | | | | |
| 97,500 # | 1 | | 5608- | -5628 | DELAWA | RE PER | FORATIONS |
| 20/40 SAND | 17 | | ! | | | | |
| 2000 GAL. ACID | 10 | | 5730 | -5750' | DEI AWA | ARE PER | FORATIONS |
| 97,500# | 1 | | | | DLLINW | 11(- / -/) | |
| 20/40 SAND | | 9 V | 5764- | 5784 | DELAWA | RE PERF | ORATIONS |
| | 1 | | <u> </u> | | | | |
| 1000 GAL. | | 4 | : ; - | | | | |
| ACID | 10 | | 6032 | -6052 | DELAWA | RE PEKI | ORATIONS |
| 150,000# | 10 | Bu | 1057 | -1077' | DEL ALL | ADT DED | FORATIONS |
| 20/40 SAND | () | P \ | 6057 | -60// | DELAW | are per | FURATIONS |
| | ∇ | | | | | | |
| : · · · · · · · · · · · · · · · · · · · | V | | 6105 | 27/8" | ND 2/16 | TUBING | G |
| | V | | | | | | |
| . : : | 1 | 7 | | 6306 | 83/4" | 5½" | 1615sx |
| | 4 | A A) | 6309 | PBTD | | | CIRC. TO |
| | | | | | | | SURFACE |

ENGINEERING CHART

SUBJECT MALLON 34 FEDERAL NO. 11

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| | | | | 1510 | 143/4" | 95/8" | 875 sx |
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| 15% HCL | 4 | 0 (| 5782 | -5792 | DELAW | ARE PE | RFORATIONS |
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| 20/40 SAND | 14 | | 5811 | -585A' | DELAWA | RF PFE | FORATIONS |
| 25,000# 16/30 SAMD | 1 | 97 | 3044 | | DLLAY | | IONATIONS |
| 1500 GAL. | | [4 | | | | | |
| 15% HCL | 10 | 0 | 5930 | -5946' | DELAWA | ARE PERI | FORATIONS |
| 98,000# | 10 | | | | | | |
| 20/40 SAND | 1 | | | CIBP | | | |
| 16/30 SAND | 14 | | 6/10 | CIBP | | | |
| 10/200 | 10 | [2] | 6810 | -6816 | DELAWAR | RE PERE | ORATIONS |
| | 10 | | | | · · · · · · · · · · · · · · · · · · · | | |
| | | | | 7044' | 83/4" | 5½" | 980 sx |
| | | $\rightarrow \emptyset \emptyset$ | [| | | . ! | 4483 TOC |
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ENGINEERING CHART

SUBJECT MALLON 34 FEDERAL NO. 12

SHEET NO. OF

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DATE 10/13/99

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| | 100 | 15/3' | 131/2" | 95/8" | 650 sx |
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| | | i | | | SURFACE |
| (4) | | 5650' 27/8" | TUBING | | |
| 2500 CV A | | T(() F(Q)' | DEL ALLADE | DE DE DO | TIONE |
| 3500 GAL. [| | 5664-5692 | DELAWARE | PERFURE | KIIONS |
| 1972 | 00 | 5725-5738 | DELAWARE | PERFOR | ATIONS |
| 393,800# | | | | 4 | . |
| 20/40 SAND V | 0 4 | 5741-5744 | DELAWARE | PERFOR | ATIONS |
| 66,000# | B | 5780-5796' | DEL ALMA DI | = DEREA | RATIONS |
| PESIN CONTED A | | 5700 5716 | ULLAWAN | | |
| 10/40 SAND | E | 5816-5832' . | DELAWARE | PERFO | RATIONS |
| | | 5884-5916' [| DELAWARE | PERFO | RATIONS |
| 70 | | | | | |
| \4 | > | 6100' CIBP | : | | |
| 4 | | 6103' SAN | ANDRES I | PERFORA | TION |
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| | | 6120' PBTE |) | <i>/~1, "</i> | |
| | D | 6200' | 834-77/8" | 5/2 | 1190 5x |
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ENGINEERING CHART

SUBJECT MALLON 34 FEDERAL NO. 13

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| 52,000# | A | - T. H | | | | | | | | | | | |
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| | 4 | 4 | | · · | | | (667 | | 3/4" | 5½" | - | 628 sx 3730'T | <u>(</u> |
| | <u></u> | ~ | | | | | | | | | | 3/30/ | UC |
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ENGINEERING CHART

SUBJECT MALLON 34 FEDERAL

SHEET NO. OF

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DATE 10/13/99

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| (1) | 7 | | 1489' | 1434-1312" | 95/3" | 850 sx |
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| ACID | \forall | | 5677-5679 | | and the second second | |
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| 8,000# | 10 | | 5712-5714' | | | |
| 0/40 SAND | 12 | | 5718-5720 | | and the second second | |
| | (" | E D | _5756-5758′ | | PERFOR/ | ATIONS |
| <u></u> | 10 | 11 / | 5757' 2% | TUBING | | |
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ENGINEERING CHART

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SHEET NO.

SUBJECT MALLON 34 FEDERAL NO. 16

COMPLETION DATE 9/25/97

DATE 10/13/99

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ENGINEERING CHART

SUBJECT MALLON 34 FEDERAL NO. 17

SHEET NO. OF

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DATE 10/25/99

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ENGINEERING CHART

SUBJECT MESCALERO RIDGE UNIT NO. 4

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DATE 10/13/99

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ENGINEERING CHART

SUBJECT QUAIL RIDGE 3 FEDERAL NO. 1

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| 6000 GAL. | | B V | 5612-5649 | DEL ALLA DE | DEDECI | ZATIONS | |
| 10% ACID | V | | 5612-3641 | DELAWARE | PERFU | ALIONS_ | |
| 137,000# | -1- | E | 5709-5746 | DELAWADE | PEREN | PATIONS | |
| 24,000 # | 19 | | 51015140 | DLLAVALL | 12110 | NA HON 3 | |
| 16/30 RC SAND | DX | | 5907 RBP | | | | |
| 10130 RC Jawo | 1 | | | | | | |
| | | | | | | | |
| | P | V | 7990' 238" | TUBING | | | |
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| 3000 GAL. | | © △ \ | 8126-8159 | DELAWARE | PERFO | RATIONS | |
| ACID | 10 | | | | | | |
| 176,700# | | | 8203-8242' | DELAWARE | PERFOR | RATIONS | |
| 16/30 SAND | 0 | - 7 | | <u> </u> | | | |
| : | 17/ | V | 8340' PBTI | 7 | | | |
| | 1 | | 8400 | 7%" | 5%" | 5250 sx | |
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ENGINEERING CHART

FILE

APPN

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Mallon 34 Fed. No. 8 Form C-108 Attachment Oct. 25, 1999 Page 9

VII. Proposed Operation

A powered salt water disposal pump will be located on the wellsite. A salt water gathering system will transport from our tank battery, located at our Mallon '34' Federal No. 2 well, 660' FNL 660' FEL Sec 34 T19S R34E. At the present time, 13 wells produce approximately 400 BWPD. If the well's disposal capacity is such to handle additional water, other operators' wells in the area may be trucked in to the storage tanks.

The average injection rate is estimated at 470 BWPD and will be subject to pressure limitation.

The proposed maximum injection rate is 1000 BWPD and will be subject to pressure limitation.

The system will be open.

The proposed average injection pressure is 1129 psi or as determined by step rate test and approved by state.

The proposed maximum injection pressure is 1129 psi or as determined by step rate test and approved by state.

The sources of injected water will be from the Delaware and Morrow.

VIII. Geologic Data

Geological Name: Delaware

Lithological Detail: Very fine to fine grained sandstone

Formation Top: 5586'

Thickness: Thickness of the Delaware is approximately 1750' at this well.

<u>Depth</u>: Well reached total depth while in San Andres limestone at 6300'

Geological Data of

<u>Drinking Water Zone</u>: The underground source of drinking water overlying the zone of

disposal is the Ogalla, which occurs 65 to 150 feet in this area and is

approximately 100-200' thick.

IX. Proposed Stimulation Program

None proposed at this time.

X. Log and Test Data:

Logs were previously filed by operator, Mallon Oil Company.

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XI. Analysis of fresh water well attached:

No known fresh water wells within 1 mile of this proposed injection well.

<u>XII.</u>

After examining all available geological and engineering data, we find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII.

A copy of our application has been furnished by certified mail to the surface owner and to each leasehold operator within one-half mile of our proposed injection well. See listing on Exhibit -C-.

JAMES BRUCE

ATTORNEY AT LAW

POST OFFICE BOX 1056 SANTA FE, NEW MEXICO 87504

3304 CAMINO LISA SANTA PE, NEW MEXICO 87501

(505) 982-2043 (505) 982-2151 (PAX)

November 1, 1999

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Bureau of Land Management P.O. Box 1778 Carlsbad, New Mexico 88221

Nearburg Exploration Company, L.L.C. Building 2, Suite 120 3300 North A Street Midland, Texas 79705

Ladies and Gentlemen:

Enclosed is a copy of an administrative application for a salt water disposal well, filed with the New Mexico Oil Conservation Division by Mallon Oil Company, regarding the Federal 34 Well No. 8, located in the NW/SE% of Section 34, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico. If you object to the application, you must notify the Division in writing no later than Tuesday, November 16, 1999. The Division's address is 2040 South Pacheco Street, Santa Fe, New Mexico 87505 (attention: David R. Catanach). Failure to object will preclude you from contesting this matter at a later date.

Very truly yours,

James Bruce

Attorney for Mallon Oil Company



STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

GOVERNOR

11/3/99

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88241-1980 (505) 393-6161

| OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501 |
|---|
| RE: Proposed: MC DHC NSL NSP SWD WFX PMX |
| Gentlemen: |
| I have examined the application for the: Mallon Gl Co Mallon 34 Federal 5-J-34-195-34 Dease & Well No. Unit S-T-R and my recommendations are as follows: |
| |
| |
| Yours very truly, Misselliams Cheis Williams |
| Supervisor, District 1 |