

SOUTH TAYLOR 13 #3 CONVERT TO INJECTION NMOCD Form C-108 Section III

- III. Data on injection well(s)
 - A. Injection well information (see attached schematic)

Tabular data

1. Lease: South Taylor 13

Well No: 3 (To be renamed ESDU #1)

Location: 430' FSL & 1650' FEL, Sec 13 T-18-S R-31-E, Eddy County, NM

- 2. Casing: 8 5/8", 24 #/ft, surface @ 366' in 12 1/4" hole, cemented w/230 sx. TOC @ surf.
 - 5 1/2", 15.5 #/ft, production casing @ 5450' in 7 7/8" hole, cemented w/ 1950 sx. TOC @ surf.

 - 4. Packer: An internally plastic coated Baker-Loc Set injection packer set @ +/- 5000'.
- B. Other well information
 - 1. Injection formation: Delaware

Field: East Shugart

2. Existing perforations: 4848-70 & 4330-4428 (These will be squeezed off with cement.)

Proposed perfs: 5090-5420 w/ 2 JSPF

- 3. This well was drilled as a Delaware oil well.
- There are no other perfed or tested intervals in this well.
- 5. Within the area of this well the Grayburg is productive at a depth of 4300'. The Bone Spring is productive at a depth of 7800'.

ST. MARY LAND & EXPLORATION CURRENT

WELL: SOUTH TAYLOR 13 #3

FIELD: EAST SHUGART INTERVAL: DELAWARE

LOCATION:

430' FSL & 1650' FEL

SECTION 13

CMT W/1950 SXS, TOC @ SURFACE.

TWP-18-S, RNG-31-E EDDY COUNTY, NM

SURFACE CASING:
RAN 24# 8 5/8" J – 55 CSG, SET @ 366' CMT W/230 SXS TOC @ SURFACE.

PRESENT COMPLETION INTERVAL:
DELAWARE – 4848 – 70'
GRAYBURG – 4330 – 4428'

PRODUCTION CASING:
RAN 15.5# 5 1/2" J – 55 CSG, SET @ 5450'.

TD: 5450' PBTD: 4781'

ST. MARY LAND & EXPLORATION PROPOSED

WELL: ESDU #1 (FORMERLY SOUTH TAYLOR 13 #3)

FIELD: EAST SHUGART

INTERVAL: DELAWARE

LOCATION:

430' FSL & 1650' FEL

SECTION 13

TWP-18-S, RNG-31-E EDDY COUNTY, NM

SURFACE CASING:
RAN 24# 8 5/8" J-55 CSG, SET @ 366' CMT W/230 SXS TOC @ SURFACE.

PROPOSED COMPLETION INTERVAL:
SQUEEZE OFF GRAYBURG AND CHERRY CANYON PERFS WITH CEMENT.

PERFORATE THE BRUSHY CANYON AT 5090-5420'

2 3/8" PLASTIC COATED TUBING SET @ 5000' WITH A PLASTIC COATED BAKER LOC-SET PACKER

PRODUCTION CASING:
RAN 15.5# J-55 CSG, SET @ 5450'.

CMT W/1950 SXS, TOC @ SURFACE.

TD: 5450' PBTD: 4781'

DRILL AS INJECTOR

NMOCD Form C-108 Section III

- III. Data on injection well(s)
 - A. Injection well information (see attached schematic)

Tabular data

1. Lease: East Shugart Delaware Unit (ESDU)

Well No: 17

Location: 248' FNL & 302' FEL, Sec 24 T-18-S R-31-E, Eddy County, NM

- 2. Casing: 8 5/8", 24 #/ft, surface @ 350' in 12 1/4" hole.
 TOC @ surf.
 - 5 1/2", 15.5 #/ft, production casing @ 5500' in 7 7/8" hole, TOC @ surf.

 - 4. Packer: An internally plastic coated Baker Loc-set injection packer set @ +/- 5000'.
- B. Other well information
 - 1. Injection formation: Delaware

- 2. Proposed perfs: 5030'-5310' w/ 2 JSPF
- 3. This well will be drilled as a Delaware injection well.
- 4. No other intervals will be perfed or tested in this well.
- 5. Within the area of this well the Grayburg is productive at a depth of 4300'. The Bone Spring is productive at a depth of 7800'.

WELL: ESDU #17 FIELD: EAST SHUGART INTERVAL: DELAWARE LOCATION: 248' FNL & 302' FEL SECTION 24 TWP-18-S, RNG-31-E EDDY COUNTY, NM

SURFACE CASING:
24#, J-55, 8 5/8" CSG, SET @ 350'
TOC @ SURFACE.

PROPOSED COMPLETION INTERVAL:

DELAWARE - 5030' - 5310'

2 3/8" DUOLINE PVC LINED TUBING SET @ 5000' WITH A PLASTIC COATED BAKER LOC - SET PACKER

PRODUCTION CASING:
15.5#, J-55, 5 1/2" CSG, SET @ 5500'.
TOC @ SURFACE.

ESDU #18 DRILL AS INJECTOR NMOCD Form C-108 Section III

III. Data on injection well(s)

A. Injection well information (see attached schematic)

Tabular data

1. Lease: East Shugart Delaware Unit (ESDU)

Well No: 18

Location: 190' FNL & 1045' FWL, Sec 19 T-18-S R-32-E, Lea County, NM

2. Casing: 8 5/8", 24 #/ft, surface @ 350' in 12 1/4" hole TOC @ surf.

5 1/2", 15.5 #/ft, production casing @ 5500' in
7 7/8" hole, TOC @ surf.

- 3. Injection tubing: + or 156 jts 2 3/8", 4.7 lb/ft, J-55 Duoline PVC lined tubing.:
- 4. Packer: An internally plastic coated Baker Loc-set injection packer set @ +/- 5000'.
- B. Other well information
 - 1. Injection formation: Delaware

- Proposed perfs: 5065'- 5320' w/ 2 JSPF
- 3. This well will be drilled as a Delaware injection well.
- 4. No other intervals will be perfed or tested in this well.
- 5. Within the area of this well the Grayburg is productive at a depth of 4300'. The Bone Spring is productive at a depth of 7800'.

WELL: ESDU #18 FIELD: EAST SHUGART

INTERVAL: DELAWARE

LOCATION:

190' FNL & 1045' FWL

SECTION 19

TWP-18-S, RNG-32-E

LEA COUNTY, NM

SURFACE CASING: 24#, J-55, 8 5/8" CSG, SET @ 350' TOC @ SURFACE. PROPOSED COMPLETION INTERVAL: DELAWARE - 5065' - 5320' 2 3/8" DUOLINE PVC LINED TUBING SET @ 5000' WITH A PLASTIC COATED BAKER LOC-SET PACKER PRODUCTION CASING: 15.5#, J-55, 5 1/2" CSG, SET @ 5500'. TOC @ SURFACE.

DRILL AS INJECTOR

NMOCD Form C-108 Section III

- III. Data on injection well(s)
 - A. Injection well information (see attached schematic)

Tabular data

1. Lease: East Shugart Delaware Unit (ESDU)

Well No: 19

Location: 1288' FNL & 1361' FEL, Sec 24 T-18-S

R-31-E, Eddy County, NM

2. Casing: 8 5/8", 24 #/ft, surface @ 350' in 12 1/4" hole

TOC @ surf.

5 1/2", 15.5 #/ft, production casing @ 5550' in

7 7/8" hole, TOC @ surf.

3. Injection tubing: + or - 156 jts 2 3/8", 4.7 lb/ft, J-55 Duoline PVC lined tubing.:

4. Packer: An internally plastic coated Baker Loc-set injection packer set @ +/- 5000'.

- B. Other well information
 - 1. Injection formation: Delaware

- 2. Proposed perfs: 5020'- 5310' w/ 2 JSPF
- 3. This well will be drilled as a Delaware injection well.
- 4. No other intervals will be perfed or tested in this well.
- 5. Within the area of this well the Grayburg is productive at a depth of 4300'. The Bone Spring is productive at a depth of 7800'.

WELL: ESDU #19 FIELD: EAST SHUGART

INTERVAL: DELAWARE

LOCATION:

1288' FNL & 1361' FEL

SECTION 24

TWP-18-S, RNG-31-E

EDDY COUNTY, NM

SURFACE CASING:
24#, J--55, 8 5/8" CSG, SET @ 350'
TOC @ SURFACE.

PROPOSED COMPLETION INTERVAL:
DELAWARE - 5020' - 5310'

2 3/8" DUOLINE PVC LINED TUBING SET @ 5000' WITH A PLASTIC COATED BAKER LOC-SET PACKER

PRODUCTION CASING: 15.5#, J-55, 5 1/2" CSG, SET @ 5500'. TOC @ SURFACE.

DRILL AS INJECTOR

NMOCD Form C-108 Section III

- III. Data on injection well(s)
 - A. Injection well information (see attached schematic)

Tabular data

1. Lease: East Shugart Delaware Unit (ESDU)

Well No: 20

Location: 1250' FNL & 303' FEL, Sec 24 T-18-S

R-31-E, Eddy County, NM

2. Casing: 8 5/8", 24 #/ft, surface @ 350' in 12 1/4" hole TOC @ surf.

5 1/2", 15.5 #/ft, production casing @ 5550' in 7 7/8" hole, TOC @ surf.

- 4. Packer: An internally plastic coated Model R Lockset injection packer set @ +/- 5000'.
- B. Other well information
 - 1. Injection formation: Delaware

- 2. Proposed perfs: 5020'- 5310' w/ 2 JSPF
- 3. This well will be drilled as a Delaware injection well.
- 4. No other intervals will be perfed or tested in this well.
- 5. Within the area of this well the Grayburg is productive at a depth of 4300'. The Bone Spring is productive at a depth of 7800'.

WELL: ESDU #20

FIELD: EAST SHUGART INTERVAL: DELAWARE

LOCATION:

1250' FNL & 303' FEL

SECTION 24

TWP-18-S, RNG-31-E

EDDY COUNTY, NM

SURFACE CASING: 24#, J-55, 8 5/8" CSG, SET @ 350' TOC @ SURFACE. PROPOSED COMPLETION INTERVAL: DELAWARE - 5020' - 5310' 2 3/8" DUOLINE PVC LINED TUBING SET @ 5000' WITH A PLASTIC COATED BAKER LOC-SET PACKER PRODUCTION CASING: 15.5#, J-55, 5 1/2" CSG, SET @ 5500'. TOC @ SURFACE.

DRILL AS INJECTOR

NMOCD Form C-108 Section III

- III. Data on injection well(s)
 - A. Injection well information (see attached schematic)

Tabular data

1. Lease: East Shugart Delaware Unit (ESDU)

Well No: 21

Location: 1193' FNL & 1018' FWL, Sec 19 T-18-S

R-32-E, Lea County, NM

2. Casing: 8 5/8", 24 #/ft, surface @ 350' in 12 1/4" hole

TOC @ surf.

5 1/2", 15.5 #/ft, production casing @ 5550' in

7 7/8" hole, TOC @ surf.

3. Injection tubing: + or - 156 jts 2 3/8", 4.7 lb/ft,

J-55 Duoline PVC lined tubing.

4. Packer: An internally plastic coated Baker Loc-set

injection packer set @ +/- 5000'.

- B. Other well information
 - 1. Injection formation: Delaware

Field: East Shugart

2. Proposed perfs: 5015'- 5330' w/ 2 JSPF

3. This well will be drilled as a Delaware injection well.

4. No other intervals will be perfed or tested in this well.

5. Within the area of this well the Grayburg is productive at a depth of 4300'. The Bone Spring is productive at a depth of

7800'.

WELL: ESDU #21

FIELD: EAST SHUGART INTERVAL: DELAWARE

LOCATION:

1193' FNL & 1018' FWL

SECTION 19

TWP-18-S, RNG-32-E

LEA COUNTY, NM

SURFACE CASING:
24#, J-55, 8 5/8" CSG, SET @ 350'
TOC @ SURFACE.

PROPOSED COMPLETION INTERVAL:
DELAWARE - 5015' - 5330'

2 3/8" DUOLINE PVC LINED TUBING SET @ 5000' WITH A PLASTIC COATED BAKER LOC - SET PACKER

PRODUCTION CASING:
15.5#, J-55, 5 1/2" CSG, SET @ 5500'.
TOC @ SURFACE.

DRILL AS INJECTOR

NMOCD Form C-108 Section III

- III. Data on injection well(s)
 - A. Injection well information (see attached schematic)

Tabular data

1. Lease: East Shugart Delaware Unit (ESDU)

Well No: 22

Location: 2330' FNL & 1320' FEL, Sec 24 T-18-S

R-31-E, Eddy County, NM

2. Casing: 8 5/8", 24 #/ft, surface @ 350' in 12 1/4" hole TOC @ surf.

5 1/2", 15.5 #/ft, production casing @ 5550' in 7 7/8" hole, TOC @ surf.

- 4. Packer: An internally plastic coated Baker Loc-set injection packer set @ +/- 5000'.
- B. Other well information
 - 1. Injection formation: Delaware

- 2. Proposed perfs: 5030'- 5340' w/ 2 JSPF
- 3. This well will be drilled as a Delaware injection well.
- 4. No other intervals will be perfed or tested in this well.
- 5. Within the area of this well the Grayburg is productive at a depth of 4300'. The Bone Spring is productive at a depth of 7800'.

WELL: ESDU #22

FIELD: EAST SHUGART INTERVAL: DELAWARE

LOCATION:

2330' FNL & 1320' FEL

SECTION 24

TWP-18-S, RNG-31-E EDDY COUNTY, NM

PROPOSED COMPLETION INTERVAL:

DELAWARE – 5030' – 5340'

2 3/8" DUOLINE PVC LINED TUBING SET @ 5000' WITH A PLASTIC COATED BAKER LOC – SET PACKER

PRODUCTION CASING:
15.5#, J – 55, 5 1/2" CSG, SET @ 5500'.
TOC @ SURFACE.

DRILL AS INJECTOR

NMOCD Form C-108 Section III

- III. Data on injection well(s)
 - A. Injection well information (see attached schematic)

Tabular data

1. Lease: East Shugart Delaware Unit (ESDU)

Well No: 23

Location: 2322' FNL & 248' FEL, Sec 24 T-18-S R-31-E, Eddy County, NM

2. Casing: 8 5/8", 24 #/ft, surface @ 350' in 12 1/4" hole TOC @ surf.

5 1/2", 15.5 #/ft, production casing @ 5500' in 7 7/8" hole, TOC @ surf.

- 4. Packer: An internally plastic coated Baker Loc-set injection packer set @ +/- 5000'.
- B. Other well information
 - 1. Injection formation: Delaware

- 2. Proposed perfs: 5025'- 5345' w/ 2 JSPF
- 3. This well will be drilled as a Delaware injection well.
- 4. No other intervals will be perfed or tested in this well.
- 5. Within the area of this well the Grayburg is productive at a depth of 4300'. The Bone Spring is productive at a depth of 7800'.

WELL: ESDU #23 FIELD: EAST SHUGART

INTERVAL: DELAWARE

LOCATION:

2322' FNL & 248' FEL

SECTION 24

TWP-18-S, RNG-31-E EDDY COUNTY, NM

SURFACE CASING:
24#, J-55, 8 5/8" CSG, SET @ 350'
TOC @ SURFACE.

PROPOSED COMPLETION INTERVAL:
DELAWARE - 5025' - 5345'

2 3/8" DUOLINE PVC LINED TUBING SET @ 5000' WITH A PLASTIC COATED BAKER LOC - SET PACKER

PRODUCTION CASING:
15.5#, J-55, 5 1/2" CSG, SET @ 5500'.
TOC @ SURFACE.

DRILL AS INJECTOR

NMOCD Form C-108 Section III

- III. Data on injection well(s)
 - A. Injection well information (see attached schematic)

Tabular data

1. Lease: East Shugart Delaware Unit (ESDU)

Well No: 24

Location: 2322' FNL & 1073' FWL, Sec 19 T-18-S

R-32-E, Lea County, NM

2. Casing: 8 5/8", 24 #/ft, surface @ 350' in 12 1/4" hole

TOC @ surf.

5 1/2", 15.5 #/ft, production casing @ 5500' in

7 7/8" hole, TOC @ surf.

- 4. Packer: An internally plastic coated Baker Loc-set injection packer set @ +/- 5000'.
- B. Other well information
 - 1. Injection formation: Delaware

Field: East Shugart

- 2. Proposed perfs: 5030'- 5360' w/ 2 JSPF
- 3. This well will be drilled as a Delaware injection well.
- 4. No other intervals will be perfed or tested in this well.
- 5. Within the area of this well the Grayburg is productive at a depth of 4300'. The Bone Spring is productive at a depth of 7800'.

.

WELL: ESDU #24 FIELD: EAST SHUGAF

FIELD: EAST SHUGART INTERVAL: DELAWARE

LOCATION:

2322' FNL & 1073' FWL

SECTION 19

TWP-18-S, RNG-32-E

LEA COUNTY, NM

PROPOSED COMPLETION INTERVAL:

DELAWARE - 5030' - 5360'

2 3/8" DUOLINE PVC LINED TUBING SET @ 5000' WITH A PLASTIC COATED BAKER LOC - SET PACKER

PRODUCTION CASING:
15.5#, J-55, 5 1/2" CSG, SET @ 5500'.
TOC @ SURFACE.