Dockets Nos. 8-85 and 9-85 are tentatively set for March 13, and March 27, 1985. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 27, 1985

8:00 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Michael E. Stogner, Examiner, or Gilbert P. Quintana, Alternate Examiner:

## CASE 8484:

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit La Jet, Inc., the Travelers Indemnity Company, and all other interested parties to appear and show cause why the La Jet, Inc. State Well No. 1 located 660 feet from the South line and 2310 feet from the West line of Section 16, Township 21 South, Range 34 East, Lea County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

## CASE 8485:

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit San Juan Petroleum Company, National Surety Co., and all other interested parties to appear and show cause why the Palmer Well No. 1 located 300 feet from the North line and 300 feet from the East line (Unit A) of Section 17, Township 29 North, Range 13 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

### CASE 8486:

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Warren J. Mille San Juan Petroleum Company, the Maryland Casualty Company and all other interested parties to appear and show cause why the Umbenhour Well No. 1 located in the SE/4 SW/4 (Unit N) of Section 9, Township 29 North, Range 13 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging programment.

# CASE 8487:

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit J. Warren Miller and other interested parties to appear and show cause why the Culpepper Well No. 1 located 694 feet from the South line and 996 feet from the West line (Unit M) of Section 16, Township 29 North, Range 13 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

### CASE 8488:

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit J. E. Amenda and all other interested parties to appear and show cause why the Vergie Schenck Well No. 1, aka Schenckland Well No. 1, located 350 feet from the North line and 660 feet from the East line (Unit A) of Section 14, Township 29 North, Range 13 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

# CASE 8489:

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Animas Oil Company and all other interested parties to appear and show cause why the John C. Sutton Well No. 1 located 304 feet from the North line and 2242 feet from the West line (Unit C) of Section 12, Township 29 North, Range 13 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

### CASE 8490:

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Farmington Syndicate and all other interested parties to appear and show cause why the Blake Well No. 1 located in the SW/4 SE/4 (Unit 0) of Section 16, Township 29 North, Range 13 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

# CASE 8491:

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Basin Company and all other interested parties to appear and show cause why the Ted White Well No. 78 located 1850 feet from the North line and 790 feet from the East line (Unit H) of Section 18, Township 29 North, Range 13 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

### CASE 8492:

Application of Gulf Oil Corporation for a unit agreement, McKinley County, New Mexico.

Applicant, in the above-styled cause, seeks approval of the North Hospah Federal-State Unit Area comprising 1,280 acres, more or less, of Federal and State lands in Township 19 North, Range 8 West.

- CASE 8493: Application of J. M. Huber Corporation for salt water disposal, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4630 feet to 6050 feet in the Cabot "Q" State Well No. 1 located 1980 feet from the South line and 560 feet from the West line of Section 7, Township 15 South, Range 35 East.
- Application of TXO Production Corp. for compulsory pooling and an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in all formations from 4,825 feet beneath the surface through the base of the Bone Spring formation underlying the NW/4 NW/4 of Section 26, Township 18 South, Range 32 East, Querecho Plains-Lower and Upper Bone Spring Pools, to form a standard 40-acre oil spacing and proration unit, to be dedicated to a well to be drilled at a standard oil well location 660 feet from the North and West lines of said Section 26. Applicant further seeks an order pooling all mineral interests from the base of the Bone Spring formation to the base of the Morrow formation underlying the N/2 of said Section 26, to form a standard 320-acre gas spacing and proration unit also to be dedicated to the above-described well which is an unorthodox gas well location for the N/2, 320-acre gas spacing and proration unit in said Section 26. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 8450: (Continued from February 13, 1985, Examiner Hearing)

Application of Robert E. Chandler Corporation for compulsory pooling and a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Blinebry formation underlying a non-standard oil proration unit, consisting of approximately 25.9 acres, comprising Lot 4 of Section 29, Township 18 South, Range 39 East, NMPM, East Hobbs-Blinebry Pool, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

- Application of J. F. Herbig for compulsory pooling, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Drinkard and Abo formations underlying the NE/4 NE/4 of Section 11, Township 20 South, Range 38 East, House-Abo and House-Drinkard Pools, to be dedicated to a well to be drilled at a standard location thereon.

  Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 8496: Application of Chaveroo Operating Co., Inc. for compulsory pooling, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to 4,400 feet underlying the NE/4 NE/4 of Section 25, Township 7 South, Range 32 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 8497: Application of Chaveroo Operating Co., Inc. for compulsory pooling, Roosevelt County, New Mexico.

  Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to 4,400 feet underlying the NW/4 NW/4 of Section 25, Township 7 South, Range 32 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 8498: Application of Pennzoil Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location 990 feet from the South line and 660 feet from the East line of Section 35, Township 16 South, Range 34 East, to test all formations from the top of the Wolfcamp formation to the base of the Pennsylvanian formation, the E/2 of said Section 35 to be dedicated to the well.

CASE 8499: Application of Pennzoil Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location 990 feet from the South line and 660 feet from the West line of Section 36, Township 16 South, Range 34 East, to test all formations from the top of the Wolfcamp formation to the base of the Pennsylvanian formation, the W/2 of said Section 36 to be dedicated to the well.

CASE 8500:

Application of Pennzoil Company for an unorthodox gas well location, Lea County, New Mexico. Applicant in the above-styled cause, seeks approval of an unorthodox gas well location 510 feet from the South line and 990 feet from the East line of Section 30, Township 19 South, Range 34 East, to test various formations from the top of the Queen formation to the base of the Pennsylvanian formation. The above-described well is an unorthodox gas well location for any and all formations or pools dedicated to either 160-acre or 320-acre spacing and proration units. The SW/4 of said Section 30 is to be dedicated to the well if the gas produced is subject to 160-acre spacing and the S/2 of said Section 30 is to be dedicated to the well if the gas produced is subject to 320-acre

CASE 8501:

Application of Harben-Davis, a Partnership, for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Abo formation (approximate depth 8500 defect) underlying the SW/4 SW/4 (Unit M) of Section 22, Township 16 South, Range 38 East, to be dedicated to a well to be drilled at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to be defined at a standard to a well to a well to be defined at a standard to a well to a location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 8502:

Application of Yates Drilling Company for a pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project in the Southeast Chaves Queen Gas Area Associated Pool by the injection of water into the Queen formation through the perforated interval from approximately 2991 feet to 2997 feet in its Doyal Well No. 3 located 1980 feet from the South line and 990 feet from the East line (Unit I) of Section 27, Township 12 South, Range 31 East.

CASE 8503:

Application of Yates Petroleum Corporation for an unorthodox oil well location, Lea County, New Mexicon Applicant, in the above-styled cause, seeks approval of an unorthodox oil well location 990 feet from the South line and 2310 feet from the East line (Unit 0) of Section 35, Township 15 South, Range 36 East, Dean-Permo Pennsylvanian Pool, the W/2 SE/4 of said Section 35 to be dedicated to the well.

CASE 8472: (Continued from February 13, 1985, Examiner Hearing)

Application of Inexco Oil Company for compulsory pooling and a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in all formations from the surface to the top of the Strawn formation underlying the NW/4 SE/4 of Section 13. Township 17 South, Range 37 East, to form a standard 40-acre oil proration unit to be dedicated to & well to be drilled at a standard oil well location 1980 feet from the South and East lines of said Section 13. Applicant further seeks an order pooling all mineral interests in the Strawn formation underlying the NE/4 SW/4 and NW/4 SE/4 of said Section 13, to form a non-standard 80-acre oil proration unit also to be dedicated to the above-described well. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 8504:

Application of Southland Royalty Company for compulsory pooling, Eddy County, New Mexico.

Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the top of the Wolfcamp formation to the base of the Pennsylvanian formation underlying the S/2 of Section 12, Township 19 South, Range 28 East, to be dedicated to a well to be deficited at a standard gas well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 8478: (Continued from February 13, 1985, Examiner Hearing)

Application of BTA Oil Producers for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the NE/4 of Section 25, Township 20 South, Range 34 East, Lea-Pennsylvanian Gas Pool, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 8505:

Application of Chama Petroleum Company for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the top of the Wolfcamp formation and from the top of the Pennsylvanian to the base of the Morrow formation underlying the NE/4 of Section 25, Township 20 South, Range 34 East, to form a standard gas spacing and proration unit for any and all formations and/or pools dedicated on 160-acre spacing, to be dedicated to a well to be drilled at a standard gas well location 660 feet from the North line and 1980 feet from the East line of said Section 25. Applicant further seeks an order pooling all mineral interests from the top of the Wolfcamp formation to the top of the Pennsylvanian formation underlying the E/2 of said Section 25, to form a standard 320-acre gas spacing and proration unit within said vertical limits also to be dedicated to the above-described well which is an unorthodox gas well location for an E/2, 320-acre gas spacing and proration unit in said Section 25. IN THE ALTERNATIVE, the applicant further seeks an order pooling all mineral interests from the surface to the top of the Wolfcamp formation for any and all formations and/or pools dedicated on 160-acre spacing and proration units, underlying the NE/4 of said Section 25, to be dedicated to the above-described well to be drilled at a standard gas well location for a 160-acre spacing and proration unit. Applicant further seeks an order pooling all mineral interests from the top of the Wolfcamp formation to the base of the Morrow formation for any and all formations and/or pools dedicated to the above-described well which is an unorthodox gas well location for an E/2, 320-acre, gas spacing and proration unit in said Section 25. Also to be considered, in either case, will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, design

CASE 8506

Application of Amoco Production Company for salt water disposal, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Menefee formation in the perforated interval from 3904 feet to 4106 feet in its Johnson Gas Com "E" Well No. 1 located 1100 feet from the North line and 990 feet from the West line of Section 15, Township 30 North, Range 12 West.

CASE 8507:

Application of Amoco Production Company for an unorthodox well location and dual completion, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location in the Basin Dakota Pool and an unorthodox oil well location in the Pinon Gallup Oil Pool for a well to be drilled 850 feet from the South line and 100 feet from the West line of Section 11, Township 28 North, Range 12 West, to be dually completed in both pools, the previously approved 366.46-acre non-standard gas proration unit comprising Lots 1, 2, 3, and 4, the SE/4 SW/4, and the S/2 SE/4 of partial Section 10, Township 28 North, Range 12 West, plus Lots 3 and 4, and the S/2 SW/4 of said partial Section 11 to be dedicated to the well in the Basin Dakota Pool and the S/2 SW/4 of said partial Section 11 forming a standard 80-acre proration unit to be dedicated to the well in the Pinon Gallup Pool.

CASE 8468: (Continued and Readvertised)

Application of Damson Oil Corporation for certain findings for an infill well in San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order determining that the Getty Oil Company (Texaco Inc.) operated Mexico Federal "K" Well No. 1-E located 1190 feet from the South line and 2020 feet from the West line of Section 8, Township 28 North, Range 10 West, NMPM, Basin-Dakota Pool, the previously approved 319.67-acre non-standard gas proration unit comprising Lots 1, 2, and 3, the SE/4 SW/4 and the S/2 SE/4 of partial Section 8 and Lots 3 and 4 and the S/2 SW/4 of partial Section 9, both in Township 28 North, Range 10 West, dedicated to the subject well in which Damson Oil Corporation owns an interest; is an authorized "infill well" within a designated pool where a second well on an established gas proration and drilling unit is necessary to recover additional gas from the pool; was drilled for the purpose of increasing the recovery of gas from the pool; and the operator has done nothing to restrict the ability of the original well in the above-described proration unit to produce into the pipeline; and, further, that said well is exempt from the provisions of the New Mexico Natural Gas Pricing Act (62-7-1 through 62-7-10, NMSA, 1978) pursuant to Laws of 1984, Chapter 123, Section 13.8.

# CASE 8469: (Continued and Readvertised)

Application of Damson Oil Corporation for certain findings for an infill well in San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order determining that the Mesa Petroleum Co. operated McLeod Well No. 2-E located 1530 feet from the North line and 930 feet from the West line of Section 34, Township 28 North, Range 10 West, NMPM, Basin-Dakota Pool, the S/2 of said Section 34 dedicated to the subject well in which Damson Oil Corporation owns an interest; is an authorized "infill well" within a designated pool where a second well on an established gas proration and drilling unit is necessary to recover additional gas from the pool; was drilled for the purpose of increasing the recovery of gas from the pool; and the operator has done nothing to restrict the ability of the original well in the above-described proration unit to produce into the pipeline; and, further, that said well is exempt from the provisions of the New Mexico Natural Gas Pricing Act (62-7-1 through 62-7-10, NMSA, 1978) pursuant to laws of 1984, Chapter 123, Section 13.B.

CASE 8508: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating and assigning discovery allowable and extending certain pools in Chaves and Lea Counties, New Mexico:

(a) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Bone Spring production and designated as the Northwest Antelope Ridge-Bone Spring Pool. The discovery well is the Curry Resources Pronghorn State Well No. 1 located in Unit J of Section 9, Township 23 South, Range 34 East, NMPM. Said pool would comprise:

### TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM

Section 9: SE/4

(b) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Bone Spring production and designated as the Arkansas Junction-Bone Spring Pool. The discovery well is the Gulf Oil Corporation Lea ACF State Well No. 1 located in Unit A of Section 35, Township 18 South, Range 36 East, NMPM. Said pool would comprise:

### TOWNSHIP 18 SOUTH, RANGE 36 EAST, NMPM

Section 35: NE/4

(c) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Bone Spring production and designated as the Bradley-Bone Spring Pool. The discovery well is the Gulf Oil Corporation Wilson C Federal Well No. 1 located in Unit E of Section 29, Township 26 South, Range 34 East, NMPM. Said pool would comprise:

### TOWNSHIP 26 SOUTH, RANGE 34 EAST, NMPM

Section 29: NW/4

(d) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Strawn production and designated as the Langley-Strawn Pool. Further, assign approximately 186,400 barrels of discovery allowable to the discovery well, the ARCO Oil & Gas Company Langley Griffin Well No. 1 located in Unit J of Section 28, Township 22 South, Range 36 East, NMPM. Said pool would comprise:

### TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM

Section 28: SE/4

(e) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Mississippian production and designated as the Lowe Ranch-Mississippian Gas Pool. The discovery well is the Kimbark Oil and Gas Company M. F. Walker Well No. 2 located in Unit J of Section 27, Township 12 South, Range 37 East, NMPM. Said pool would comprise:

# TOWNSHIP 12 SOUTH, RANGE 37 EAST, NMPM

Section 27: SE/4

(f) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Grayburg production and designated as the Mescalero Escarpe-Grayburg Pool. The discovery well is the Cities Service Oil and Gas Corporation State DW Well No. 5 located in Unit P of Section 12, Township 18 South, Range 33 East, NMPM. Said pool would comprise:

#### TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM

Section 12: SE/4

(g) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Atoka production and designated as the Red Hills-Atoka Gas Pool. The discovery well is the HNG Oil Company Vaca 13 Federal Well No. 1 located in Unit C of Section 13, Township 25 South, Range 33 East, NMPM. Said pool would comprise:

# TOWNSHIP 25 SOUTH, RANGE 33 EAST, NMPM

Section 13: N/2

(h) EXTEND the Anderson Ranch-Morrow Gas Pool in Lea County New Mexico, to include therein:

# TOWNSHIP 15 SOUTH, RANGE 32 EAST, NMPM

Section 32: S/2

- (i) EXTEND the lower vertical limits of the Bagley-Lower Pennsylvanian Gas Pool in Lea County, New Mexico, to 5700 feet subsea.
- (j) EXTEND the Northeast Caudill-Wolfcamp Pool in Lea County, New Mexico, to include therein:

### TOWNSHIP 15 SOUTH, RANGE 36 EAST, NMPM

Section 1: NW/4

(k) EXTEND the Cedar Point-Strawn Pool in Chaves County, New Mexico, to include therein:

# TOWNSHIP 15 SOUTH, RANGE 30 EAST, NMPM

Section 26: SW/4

(1) EXTEND the Double X-Delaware Pool in Lea County, New Mexico, to include therein:

# TOWNSHIP 24 SOUTH, RANGE 32 EAST, NMPM

Section 14: SE/4

(m) EXTEND the Drinkard Pool in Lea County, New Mexico, to include therein:

# TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM

Section 1: Lots 11, 12, 13, and 14 Section 2: Lots 9, 15, and 16

(n) EXTEND the EK-Bone Spring Pool in Lea County, New Mexico, to include therein:

### TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM

Section 36: NE/4

(o) EXTEND the West Hume-Queen Pool in Lea County, New Mexico, to include therein:

#### TOWNSHIP 16 SOUTH, RANGE 33 EAST, NMPM

Section 14: SW/4

(p) EXTEND the Pearl-Queen Pool in Lea County, New Mexico, to include therein:

# TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM

Section 26: NE/4 Section 28: SE/4 (q) EXTEND the Pitchfork Ranch-Morrow Gas Pool in Lea County, New Mexico, to include therein:

# TOWNSHIP 24 SOUTH, RANGE 34 EAST, NMPM

Section 30: W/2 Section 31: W/2

(r) EXTEND the Saunders-Permo Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:

# TOWNSHIP 14 SOUTH, RANGE 33 EAST, NMPM

Section 12: SW/4

(s) EXTEND the North Young-Bone Spring Pool in Lea County, New Mexico, to include therein:

# TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 1: SW/4 Section 2: SE/4