

THE APPLICATION OF NEWFIELD EXPLORATION COMPANY TO CONSOLIDATE VARIOUS SARITA, SARITA, SW., SARITA, W. AND SARITA SHALLOW FIELDS INTO A NEW FIELD CALLED THE SARITA SHALLOW (MIO-FRIO CONS.) FIELD AND TO ADOPT FIELD RULES FOR THE SARITA SHALLOW (MIO-FRIO CONS.) FIELD, KENEDY, KLEBERG AND JIM WELLS COUNTIES, TEXAS

HEARD BY: Richard D. Atkins, P.E.

DATE OF HEARING: February 10, 2010

APPEARANCES:

REPRESENTING:

APPLICANT:

Dale E. Miller

Newfield Exploration Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Newfield Exploration Company ("Newfield") requests to consolidate 205 Sarita, Sarita, SW., Sarita, W. and Sarita Shallow Fields into a new field to be known as the Sarita (Miocene-Frio Cons.) Field. However, it was decided by commission staff that the name would not integrate into the field database, so Newfield agreed to Sarita Shallow (Mio-Frio Cons.) Field as the consolidated field name. The fields proposed for consolidation are shown in Attachment A.

Newfield requests that the following Field Rules be adopted for the new field:

1. Designation of the field as the combined correlative interval from 600 feet to 10,300 feet;
2. 330' lease line spacing with no minimum distance between wells;
3. 40 acre units with optional 20 acre density;
4. Oil allocation based on salvage, gas allocation based on 95% deliverability and 5% per well with the allocation formula suspended.

This application was unopposed and the examiner recommends approval of Newfield's request for field consolidation and adoption of Field Rules.

DISCUSSION OF THE EVIDENCE

The 205 Sarita fields were discovered beginning in December 1948. There are 72 fields classified as oil, 40 fields classified as associated and 93 fields classified as non-associated. To date, 225 wells have been completed in the proposed consolidated fields. Most of the fields operate under 467'-1,200' well spacing, 40 acre density and have 100% deliverability as the allocation formula. The fields are geographically intermingled and there are no other fields contained within the proposed correlative interval. Many of the wells have produced from up to sixteen different fields.

There are thirty shut-in oil wells with 39 completions and three producing gas wells and 29 shut-in gas wells with 38 completions shown on the proration schedules. Exxon Mobil Corporation operates all of the wells, except one shut-in gas well that is operated by the LaMay Corporation. There are 162 wells with 658 completions that are plugged and abandoned. The total cumulative production from the 205 fields proposed for consolidation through November 2009 is 339.2 BCFG and 25.4 MMBO.

Newfield has obtained a farmout on all of the acreage controlled by Exxon Mobil Corporation and has drilled one well, the Sarita Field Oil & Gas Unit, Well No.303, and permitted Well No. 304. The completion paperwork for Well No. 303 has been filed, but has not been processed through the RRC. Newfield is proposing to consolidate the 205 fields into the Sarita Shallow (Mio-Frio Cons.) Field and classify it as associated-prorated. The proposed designated interval for the consolidated field is the combined correlative interval from 600 feet to 10,300 feet as shown from 600 feet to 850 feet on the log of the Humble Oil & Refining Company - Sarita Field Oil & Gas Unit, Well No. 126 (API No. 42-261-30056), as shown from 850 feet to 9,500 feet on the log of the Newfield Exploration Company - Sarita Field Oil & Gas Unit, Well No. 303 (API No. 42-261-31521) and as shown from 9,500 feet to 10,300 feet on the log of the Humble Oil & Refining Company - Sarita Field Oil & Gas Unit, Well No. 69 (API No. 42-261-00304) Kenedy County, Texas.

The Sarita fields consist of stacked Miocene and Frio age sands that were deposited in a deltaic near shore marine environment. Cross section analysis indicates that the interval includes numerous lenticular sands with extensive lateral variability. The sands all have depletion drive as the primary drive mechanism and produce little water. Most of the sands may prove to be productive in future wells, but separate completions in each sand would not be commercial. In addition, completing in all of the productive intervals at the same time will reduce the economic limit for each interval and provide for the additional recovery of hydrocarbons.

Newfield stated that the initial cost of drilling, completing and stimulating the wellbore in five possible zones within the requested correlative interval is approximately \$3.3 million. Newfield estimated that the additional cost to complete the wellbore in each of the reservoirs separately after depletion of reserves would be approximately \$626,000. In

addition, the delay in the recovery of the reserves from each reservoir would result in the wells becoming less economic, thereby reducing the ultimate recovery.

Newfield also stated that producing all of the reservoirs simultaneously would reduce the abandonment rate for each zone and increase the ultimate recovery of hydrocarbons from all of the reservoirs. Assuming an economic limit of 10 MCFGPD and an exponential decline rate of 10% per year for gas wells and an economic limit of 1 BOPD and an exponential decline rate of 20% per year for oil wells, Newfield calculated the incremental reserves to be recovered for each additional reservoir completed in a wellbore to be 36,643 MCFG for gas wells and 1,636 BO for oil wells.

Newfield will be actively developing the interval by drilling infill wells and completing existing wells into additional zones and needs the flexibility to downhole commingle production to increase the economic viability of the wells. Minimum well spacing of 330 foot lease line spacing with no minimum distance between wells and 40 acre proration units with optional 20 acre density will provide flexibility in locating wells for future development in the Sarita area.

A multi-factor allocation formula is necessary for the protection of correlative rights pursuant to State Statutes. Since the correlative interval includes numerous lenticular sands with extensive lateral variability, the ultimate recovery is determined by sand quality and not by assigned acreage. Therefore, Newfield proposed a two-factor allocation formula for gas wells based on 95% deliverability and 5% per well. Newfield also requested that the allocation formula be suspended, as there is a 100% market for all the gas produced from the field. In addition, the maturity level of the oil fields justify a salvage classification.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and there were no protests.
2. The 205 Sarita fields were discovered beginning in December 1948. There are 72 fields classified as oil, 40 fields classified as associated and 93 fields classified as non-associated. To date, 225 wells have been completed in the proposed consolidated fields.
3. Most of the fields operate under 467'-1,200' well spacing, 40 acre density and have 100% deliverability as the allocation formula. The fields are geographically intermingled and there are no other fields contained within the proposed correlative interval.
4. There are thirty shut-in oil wells with 39 completions and three producing gas wells and 29 shut-in gas wells with 38 completions shown on the proration schedules. Exxon Mobil Corporation operates all of the wells, except one shut-in gas well that is operated by the LaMay Corporation.

5. Newfield has obtained a farmout on all of the acreage controlled by Exxon Mobil Corporation and has drilled one well, the Sarita Field Oil & Gas Unit, Well No.303, and permitted Well No. 304.
6. The 205 Sarita fields should be consolidated into the Sarita Shallow (Mio-Frio Cons.) Field and be classified as associated-prorated.
7. Wells in the 205 Sarita fields produce from the same correlative interval. The designated interval for the consolidated field should be the combined correlative interval from 600 feet to 10,300 feet as shown on the logs of the Sarita Field Oil & Gas Unit, Well Nos. 69, 126 and 303.
8. The Sarita fields consist of stacked Miocene and Frio age sands that were deposited in a deltaic near shore marine environment. Cross section analysis indicates that the interval includes numerous lenticular sands with extensive lateral variability.
9. The sands all have depletion drive as the primary drive mechanism and produce little water.
10. Newfield estimated that the additional cost to complete the wellbore in five reservoirs separately after depletion of reserves would be approximately \$626,000. In addition, the delay in the recovery of the reserves from each reservoir would result in the wells becoming less economic, thereby reducing the ultimate recovery.
11. Producing all of the reservoirs simultaneously would reduce the abandonment rate for each zone and increase the ultimate recovery of hydrocarbons from all of the reservoirs. Newfield calculated the incremental reserves to be recovered for each additional reservoir completed in a wellbore to be 36,643 MCFG for gas wells and 1,636 BO for oil wells.
12. Minimum well spacing of 330 foot lease line spacing with no minimum distance between wells and 40 acre proration units with optional 20 acre density will provide flexibility in locating wells for future development in the Sarita area.
13. A two-factor allocation formula for gas wells based on 95% deliverability and 5% per well will satisfy State Statutes. In addition, the maturity level of the oil fields justify a salvage classification.
14. Suspension of the allocation formula in the consolidated field is appropriate because there is a market for any gas produced from the field.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was given to all persons legally entitled to notice.
2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
3. Consolidation of the fields and adoption of the proposed Field Rules will prevent waste, protect correlative rights and satisfy statutory requirements.

EXAMINER'S RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends that the Commission consolidate the 205 Sarita Fields into the new field, the Sarita Shallow (Mio-Frio Cons.) Field, adopt permanent field rules and suspend the allocation formula in the new field.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Hearings Examiner

ATTACHMENT A

<u>FIELD NAME</u>	<u>FIELD NUMBER</u>
Sarita	81115 001
Sarita (AA)	81115 004
Sarita (Fleming)	81115 006
Sarita (BB)	81115 007
Sarita (1-B)	81115 008
Sarita (1-A)	81115 009
Sarita (1-A,E)	81115 010
Sarita (1-F,C)	81115 011
Sarita (1-F(W))	81115 012
Sarita (1-G)	81115 013
Sarita (1-G,A)	81115 014
Sarita (1-G,C)	81115 015
Sarita (1-G,E)	81115 016
Sarita (1-G-,W)	81115 017
Sarita (2-A)	81115 018
Sarita (2-B)	81115 023
Sarita (2-C)	81115 027
Sarita (2-D)	81115 033
Sarita (2-D,W)	81115 034
Sarita (2-F)	81115 036
Sarita (2-F,L)	81115 038
Sarita (2-F,SW)	81115 040
Sarita (2-G)	81115 045
Sarita (2-G,S)	81115 046
Sarita (2-H)	81115 047
Sarita (2-J)	81115 048
Sarita (2-J,W)	81115 049
Sarita (2-J, SW)	81115 052
Sarita (2-J, SW, II)	81115 053
Sarita (2-K,W)	81115 054
Sarita (2-L)	81115 058
Sarita (2-M)	81115 063
Sarita (3-B)	81115 072
Sarita (3-B, W)	81115 075
Sarita (3-B, NW)	81115 078
Sarita (3-C, E)	81115 081
Sarita (3-C, S)	81115 085
Sarita (3-D)	81115 090
Sarita (3-E)	81115 099
Sarita (3-G, SW)	81115 102

<u>FIELD NAME</u>	<u>FIELD NUMBER</u>
Sarita (4-A)	81115 103
Sarita (4-G)	81115 104
Sarita (4-H)	81115 108
Sarita (4-H,W)	81115 110
Sarita (5-B)	81115 112
Sarita 5-C,W)	81115 114
Sarita (5-C)	81115 115
Sarita (5-C, SW)	81115 116
Sarita (5-D)	81115 117
Sarita (5-D,W)	81115 120
Sarita (5-D, Upper)	81115 126
Sarita (5-E SW)	81115 130
Sarita (5-E, W)	81115 135
Sarita (5-G)	81115 144
Sarita (5-G & H, E)	81115 153
Sarita (5-G & H, SW)	81115 155
Sarita (5-G, W)	81115 162
Sarita (5-KLM, C)	81115 171
Sarita (5-L&M,SW)	81115 175
Sarita (5-P)	81115 180
Sarita (5-P,L)	81115 181
Sarita (5-P,W)	81115 182
Sarita (5-Q, SW)	81115 184
Sarita (5-Q, W)	81115 185
Sarita (6-A, C)	81115 186
Sarita (6-A, W)	81115 188
Sarita (6-A)	81115 189
Sarita (6-B)	81115 190
Sarita (6-C)	81115 192
Sarita (6-D)	81115 193
Sarita (6-G)	81115 195
Sarita (6-H)	81115 196
Sarita (7-B)	81115 197
Sarita (7-B, E)	81115 198
Sarita (7-B, NW)	81115 200
Sarita (7-B, S.)	81115 207
Sarita (7-B, SE.)	81115 216
Sarita (7-B,W)	81115 218
Sarita (7-D & E)	81115 225
Sarita (7-F)	81115 229
Sarita (7-H)	81115 234
Sarita (7-R & S, C)	81115 243
Sarita (7-R & S, SO.)	81115 252

<u>FIELD NAME</u>	<u>FIELD NUMBER</u>
Sarita (8-B)	81115 261
Sarita (8-C, E)	81115 270
Sarita (8-C, S.)	81115 279
Sarita (8-D)	81115 288
Sarita (8-D,S)	81115 293
Sarita (8-E)	81115 297
Sarita (9-A)	81115 303
Sarita (9-A, SE)	81115 304
Sarita (9-B)	81115 306
Sarita (9-B,W)	81115 309
Sarita (10-A)	81115 315
Sarita (10-A, C)	81115 324
Sarita (10-A, W)	81115 333
Sarita (10-G)	81115 339
Sarita (10-H)	81115 342
Sarita (10-H,SE)	81115 344
Sarita (10-H, SW)	81115 346
Sarita (10-J)	81115 348
Sarita (11-A & B, C)	81115 351
Sarita (11-A & B, E)	81115 360
Sarita (11-A, S.)	81115 369
Sarita (11-C)	81115 378
Sarita (12-A, C)	81115 387
Sarita (12-A, E & C)	81115 396
Sarita (12-A, S)	81115 405
Sarita (12-B)	81115 414
Sarita (12-B,W)	81115 415
Sarita (12-E & F)	81115 423
Sarita (12-H)	81115 432
Sarita (13-B)	81115 441
Sarita (13-B, SW)	81115 444
Sarita (13-D & E)	81115 450
Sarita (13-H)	81115 459
Sarita (13-H, C)	81115 468
Sarita (13-H, E)	81115 477
Sarita (14-A, C)	81115 486
Sarita (14-A, SW)	81115 488
Sarita (14-A, W)	81115 491
Sarita (14-C)	81115 495
Sarita (14-C, E)	81115 504
Sarita (14-C, NE.)	81115 513
Sarita (14-C,W)	81115 518
Sarita (14-D)	81115 522

<u>FIELD NAME</u>	<u>FIELD NUMBER</u>
Sarita (14-D,W)	81115 525
Sarita (14-E, C)	81115 531
Sarita (14-E, E)	81115 540
Sarita (14-E, W)	81115 544
Sarita (14-F)	81115 549
Sarita (14-F, E)	81115 558
Sarita (14-H, C)	81115 567
Sarita (15-B)	81115 576
Sarita (15-C)	81115 585
Sarita (15-E, C)	81115 594
Sarita (15-E, E)	81115 603
Sarita (15-E,W)	81115 605
Sarita (15-F)	81115 612
Sarita (15-F, C)	81115 621
Sarita (15-J)	81115 626
Sarita (15-K, C)	81115 630
Sarita (15-K, E)	81115 639
Sarita (15-L Sand)	81115 648
Sarita (15-L, N)	81115 651
Sarita (15-M)	81115 657
Sarita (15-M, C)	81115 658
Sarita (15-P)	81115 666
Sarita (15-P, SE)	81115 669
Sarita (15-S)	81115 675
Sarita (15-S,C)	81115 676
Sarita (15-S, W)	81115 680
Sarita (15-V)	81115 684
Sarita (15-V,C)	81115 690
Sarita (16-A)	81115 693
Sarita (16-A, C)	81115 702
Sarita (16-B)	81115 711
Sarita (16-C)	81115 720
Sarita (16-C,W)	81115 722
Sarita (16-E)	81115 725
Sarita (16-E, SE.)	81115 729
Sarita (16-F)	81115 738
Sarita (16-F,W)	81115 742
Sarita (16-G)	81115 745
Sarita (16-H)	81115 747
Sarita (16-K)	81115 753
Sarita (16-K, C)	81115 756
Sarita (16-K, E)	81115 765
Sarita (16-K,W)	81115 766

<u>FIELD NAME</u>	<u>FIELD NUMBER</u>
Sarita (16-L)	81115 768
Sarita (17-A)	81115 774
Sarita (17-A,W)	81115 775
Sarita (17-A 8000)	81115 783
Sarita (17-E)	81115 792
Sarita (17-E,W.)	81115 793
Sarita (17-E, W-2)	81115 794
Sarita (17-E, E.)	81115 795
Sarita (17-G)	81115 801
Sarita (17-G,C)	81115 802
Sarita (17-G, East)	81115 804
Sarita (17-H, E.)	81115 819
Sarita (17-I)	81115 828
Sarita (17-I,C)	81115 829
Sarita (17-N)	81115 837
Sarita (18-A)	81115 844
Sarita (18-B)	81115 846
Sarita (18-C & G, NE.)	81115 855
Sarita (18-G E)	81115 864
Sarita (19-F)	81115 873
Sarita (19-H)	81115 878
Sarita (19-M)	81115 882
Sarita (850)	81115 900
Sarita (1500)	81115 902
Sarita (1975)	81115 903
Sarita (2490)	81115 904
Sarita (3200)	81115 905
Sarita (9300)	81115 909
Sarita (10200)	81115 918
Sarita, SW. (B-82)	81118 150
Sarita, SW. (B-98)	81118 175
Sarita, SW. (C-04)	81118 200
Sarita, SW (2-G)	81118 500
Sarita, W. (2000)	81119 100
Sarita Shallow (1740 Sd)	81124 400
Sarita Shallow (1890 Sd)	81124 500