

**STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION**

**APPLICATION OF FAE II OPERATING, LLC FOR
PRE-APPROVAL OF DOWNHOLE COMMINGLING
OF PRODUCTION FROM THE YATES, SEVEN
RIVERS, QUEEN, AND GRAYBURG FORMATIONS
ON AN AREA-WIDE BASIS, LEA COUNTY, NEW
MEXICO.**

CASE NO. 22919

**SELF-AFFIRMED STATEMENT
OF VANESSA NEAL**

1. I am a Senior Reservoir Engineer at FAE II, LLC (“FAE”) and am over 18 years of age. I have personal knowledge of the matters addressed herein and am competent to provide this Self-Affirmed Statement. I have previously testified before the New Mexico Oil Conservation Division (“Division”) and my credentials as an expert in petroleum engineering were accepted and made a matter of record.

2. I am familiar with the engineering matters that pertain to this matter.

3. FAE currently operates approximately 600 oil and gas wells in the Commingling Area¹ that produce from the Yates, Seven Rivers, Queen, and Grayburg formations. The pools from which these wells produce, and that FAE seeks to commingle (“Commingling Pools”), are:

YATES

Code	Pool Name
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)
33820	JALMAT;TAN-YATES-7 RVRS (OIL)
52250	RHODES;YATES-SEVEN RIVERS
53770	SAN SIMON;YATES
53790	SAN SIMON;YATES, NORTH (ASSOC)
55560	SCARBOROUGH;YATES-SEVEN RIVERS
56610	SIoux;TANSILL-YATES-SEVEN RIVERS

SEVEN RIVERS

Code	Pool Name
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)
24130	EUNICE;SEVEN RIVERS-QUEEN, SOUTH
33820	JALMAT;TAN-YATES-7 RVRS (OIL)
37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG
52250	RHODES;YATES-SEVEN RIVERS
55560	SCARBOROUGH;YATES-SEVEN RIVERS
64600	WILSON;YATES-SEVEN RIVERS (ASSOC)

¹The Commingling Area is located in Lea County and includes: Township 20 South, Ranges 36 and 37 East; Township 21 South, Ranges 35 and 36 East; Township 22 South, Ranges 35 and 36 East; Township 23 South, Ranges 35, 36, and 37 East; Township 24 South, Ranges 36 and 37 East; Township 25 South, Ranges 36 and 37 East; and Township 26 South, Range 37 East.

64600	WILSON;YATES-SEVEN RIVERS (ASSOC)	76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)
76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)	79240	JALMAT;TAN-YATES-7 RVRS (GAS)
79240	JALMAT;TAN-YATES-7 RVRS (GAS)	83810	RHODES;YATES-SEVEN RIVERS (GAS)
83810	RHODES;YATES-SEVEN RIVERS (GAS)	96131	SWD;SEVEN RIVERS
96090	SWD;YATES	96132	SWD;SEVEN RIVERS-QUEEN
96141	SWD;YATES-SEVEN RIVERS	96141	SWD;YATES-SEVEN RIVERS
96397	SAN SIMON;YATES, WEST	96981	WSW;SEVEN RIVERS
97726	URSSEY TANK;YATES-SEVEN RIVERS	97726	URSSEY TANK;YATES-SEVEN RIVERS

QUEEN

Code	Pool Name
18810	DOLLARHIDE;QUEEN
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)
24130	EUNICE;SEVEN RIVERS-QUEEN, SOUTH
37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG
38760	LEONARD;QUEEN, SOUTH
76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)
96117	SWD;QUEEN
96132	SWD;SEVEN RIVERS-QUEEN
97447	SWD;QUEEN-GRAYBURG-SAN ANDRES

GRAYBURG

Code	Pool Name
03040	ARROWHEAD;GRAYBURG
23000	EUNICE MONUMENT;GRAYBURG-SAN ANDRES
37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG
50350	PENROSE SKELLY;GRAYBURG
57380	SKAGGS;GRAYBURG
96108	SWD;GRAYBURG
96111	SWD;GRAYBURG-SAN ANDRES-GLORIETA
97447	SWD;QUEEN-GRAYBURG-SAN ANDRES
97518	ARROWHEAD;GRAYBURG, SOUTHWEST
97564	ARROWHEAD;GRAYBURG, SOUTH

4. The Division routinely approves applications for downhole commingling in these pools within the Commingling Area. FAE has filed numerous applications for downhole commingling in the Commingling Area and intends to file many more in the near future.

5. Allowing FAE to submit future commingling applications via Form C-103 will reduce administrative burdens for the Division and FAE.

6. A map that identifies wells in the Commingling Pools and Commingling Area that have previously been approved for downhole commingling is attached as **Exhibit C-1**.

7. A list of previous orders authorizing commingling for the pools and area is attached as **Exhibit C-2**.

8. The bottom perforation of the lower zone is within 150 percent of the depth of the top perforation in the upper zone and the lower zone is at or below normal pressure with normal pressure assumed to be 0.433 psi per foot of depth.

9. Production curves for each zone for at least one year are attached as **Exhibit C-3**.

10. The last 5 years of production data from each zone across the Commingling Area was used to create a normalized allocation for all zones; this is attached as **Exhibit C-4**. FAE recommends that well specific allocations be included on Form C-103 to reduce influence of large area skewing factors, e.g. waterflood response, completion intervals, etc.

11. Based on my review of the wells in the Commingling Pools and Commingling area that have previously been approved for downhole commingling, it is my opinion that commingling will not jeopardize the efficiency of present or future secondary recovery operations in the pools to be commingled.

12. The proposed commingling will not result in the permanent loss of reserves due to cross-flow in the well bore.

13. The allocated production from each producing pool in the commingled well bore will not exceed the top oil or gas allowable rate for a well in that pool or rate restriction applicable to the well.

14. The proposed commingling will not reduce the value of the total remaining production.

15. Pre-approval of downhole commingling within the Commingling Area will extend the economic life of the existing wells and increase ultimate recovery from the formations.


16. One or more of the zones contained in the Commingling Area is of marginal production capacity based on recent production rates of wells producing from a single zone.

17. Based on my analysis and Mr. Hooper's analysis, sufficient data exists within the Yates, Seven Rivers, Queen, and Grayburg formations to support granting of exceptions from the criteria contained in Rule 19.15.12.11(A).

18. In my opinion, the granting of FAE's application will serve the interests of conservation, the protection of correlative rights, and the prevention of waste.

19. The exhibits attached hereto were either prepared by me or under my supervision or were compiled from company business records.

20. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm my testimony above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date identified next to my signature below.



Vanessa Neal

06/28/2022
Date

Exhibit C-1

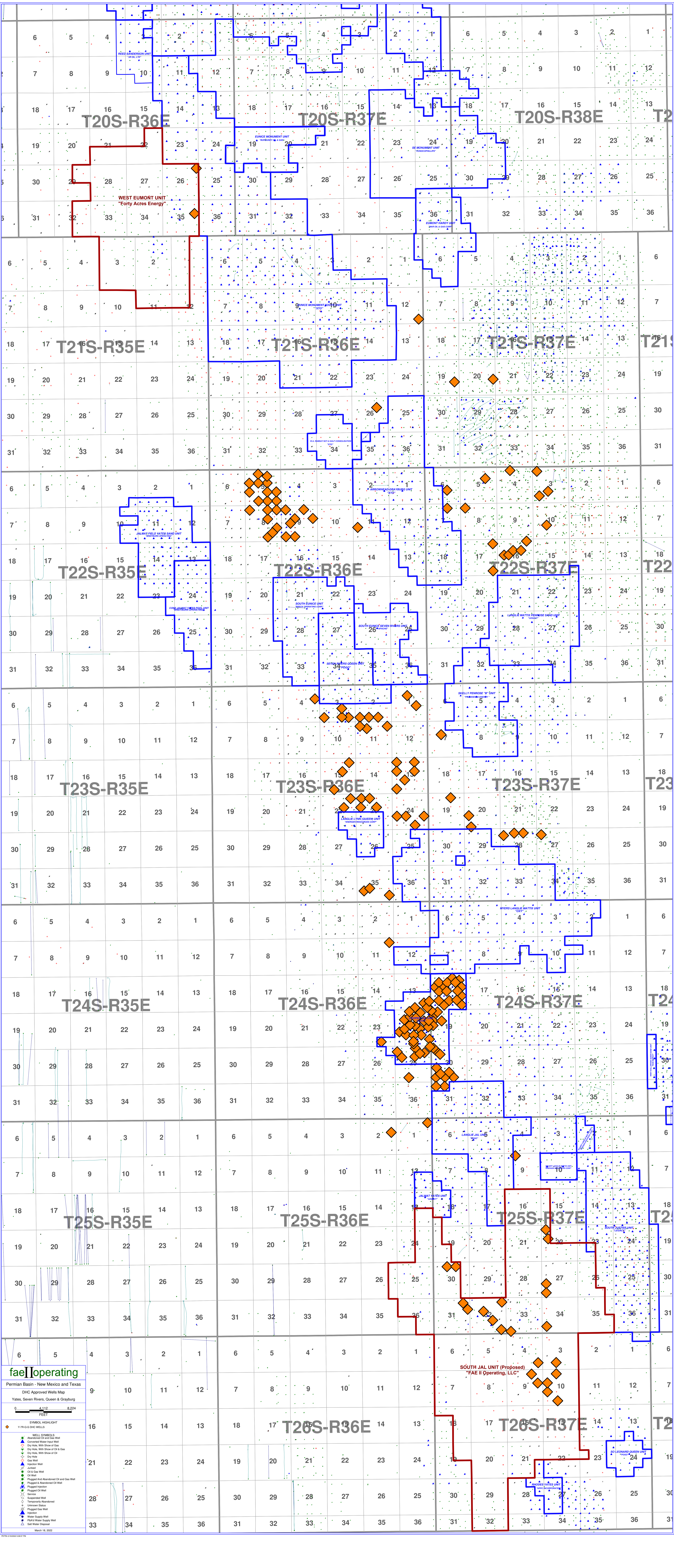


Exhibit C-2: List of Approved YATES-7 RVRs-QUEEN-GRAYBURG DHC Orders in Lea County, NM

Order Number	County	Entity	Operator	Order Date	API Number(s)
DHC-0309	Lea	MALJAMAR;GRAYBURG-SAN ANDRES , EILLIAMS #008, CORBIN;QUEEN	SOUTHWEST ROYALTIES INC	3/5/1980	3002526185
DHC-0363	Lea	JALMAT;TAN-YATES-7 RVRs (OIL) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) ,	GULF OIL CORP	6/7/1982	
DHC-0402	Lea	DUTHIE ANDREWS WN #004	ARCO OIL & GAS CO	6/16/1983	3002525070
DHC-0552	Lea	PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL) ,	MARATHON OIL CO	4/22/1985	3002509927
DHC-0608	Lea	REDDY GULF STATE #003, PENROSE SKELLY;GRAYBURG , GRAYBURG	YATES ENERGY CORP	4/28/1986	3002529568
DHC-0645	Lea	MALJAMAR;GRAYBURG-SAN ANDRES , LEAMEX #020, CORBIN;QUEEN,	PHILLIPS OIL CO	4/6/1987	3002526421
DHC-0662	Lea	WYATT A FEDERAL #013, MALJAMAR;GRAYBURG-SAN ANDRES ,	PHILLIPS OIL CO	7/29/1987	3002501363
DHC-0683	Lea	SANMAL;QUEEN , MALJAMAR;GRAYBURG-SAN ANDRES	EOG Y RESOURCES, INC.	12/22/1987	
DHC-0695	Lea	SANMAL;QUEEN , MALJAMAR;GRAYBURG-SAN ANDRES	PHILLIPS OIL CO	6/27/1988	
DHC-0714	Lea	PENROSE SKELLY;GRAYBURG , EUNICE;SAN ANDRES, SOUTHWEST , EUMONT;YATES-7 RVRs-QUEEN (OIL) , B J #001	ZIA ENERGY INC	12/19/1988	3002524616
DHC-0733	Lea	PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL) , C P WEST EUMONT UNIT #504, EUNICE MONUMENT;GRAYBURG-SAN ANDRES, EUMONT;YATES-7 RVRs-QUEEN (OIL)	TEXACO EXPLORATION & PRODUCTION INC N W	11/13/1989	3002510104
DHC-0737	Lea	WEST EUMONT UNIT #504, EUNICE MONUMENT;GRAYBURG-SAN ANDRES, EUMONT;YATES-7 RVRs-QUEEN (OIL)	PHILLIPS OIL CO	7/11/1989	3002504350
DHC-0743	Lea	STEVENS B 15 #003, LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-	CHARLES W KEMP	10/16/1989	3002510732
DHC-0759	Lea	PEARSALL;QUEEN , PEARSELL BX #003, MALJAMAR;GRAYBURG-SAN ANDRES	MACK ENERGY CORP	7/9/1990	3002524725
DHC-0760	Lea	PEARSALL;QUEEN , PEARSELL BX #004, MALJAMAR;GRAYBURG-SAN ANDRES	MACK ENERGY CORP	7/9/1990	3002530696
DHC-0763	Lea	SANMAL;QUEEN , PETRUS D #004, MALJAMAR;GRAYBURG-SAN ANDRES	MARBOB ENERGY CORP	8/2/1990	3002530195
DHC-0787	Lea	PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL) , BAKER	BEC CORP	3/13/1991	3002510183
DHC-0812	Lea	PENROSE SKELLY;GRAYBURG , L G WARLICK A #001, EUMONT;YATES-7 RVRs-QUEEN (OIL) , DRINKARD , BLINEBRY (CONSOLIDATED)	GRAHAM ROYALTY LTD	8/22/1991	3002506664
DHC-1032	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) ,	TEXACO EXPLORATION & PRODUCTION INC N W	8/30/1994	3002532551
DHC-1033	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) ,	TEXACO EXPLORATION & PRODUCTION INC N W	8/30/1994	3002532571
DHC-1034	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) ,	TEXACO EXPLORATION & PRODUCTION INC N W	8/30/1994	3002532570
DHC-1035	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) ,	TEXACO EXPLORATION & PRODUCTION INC N W	8/30/1994	3002532569
DHC-1036	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) ,	TEXACO EXPLORATION & PRODUCTION INC N W	8/30/1994	3002532568
DHC-1131	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #415, COOPER JAL UNIT #413, COOPER JAL UNIT #412, COOPER JAL UNIT #411, COOPER JAL UNIT #410, COOPER JAL UNIT #408	TEXACO EXPLORATION & PRODUCTION INC N W	5/19/1995	3002532855, 3002532856, 3002532857, 3002532858, 3002532892, 3002532969
DHC-1171	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , C	ARCH PETROLEUM INC	11/30/1995	3002528731
DHC-1187	Lea	BYERS;YATES (GAS) , BYERS;QUEEN (GAS) , BOWERS A FEDERAL #028	EXXON MOBIL CORPORATION	2/19/1996	3002523022
DHC-1349	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) ,	TEXACO EXPLORATION & PRODUCTION INC N W	9/4/1996	3002533458
DHC-1432	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , C D WOOLWORTH #005	ARCH PETROLEUM INC	2/12/1997	3002525790
DHC-1480	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , C D WOOLWORTH #005	ARCH PETROLEUM INC	4/8/1997	3002525790
DHC-1763	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , C D WOOLWORTH #004	ARCH PETROLEUM INC	1/15/1998	3002525464
DHC-1764	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , C D WOOLWORTH #009	ARCH PETROLEUM INC	1/15/1998	3002532863
DHC-1765	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , C D WOOLWORTH #010	ARCH PETROLEUM INC	1/15/1998	3002533881
DHC-1766	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , C D WOOLWORTH #011	ARCH PETROLEUM INC	1/15/1998	3002533882
DHC-2762	Lea	PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL) , ELLIOTT B FEDERAL #006	ZIA ENERGY INC	6/23/2000	3002510333
DHC-2779	Lea	RINEWALT #005, REINWALT , PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL)	APACHE CORPORATION	7/18/2000	3002534582
DHC-2917	Lea	ROY RIDDEL #003, ROY RIDDEL , EUNICE MONUMENT;GRAYBURG-SAN ANDRES, EUMONT;YATES-7 RVRs-QUEEN (OIL)	PECOS RIVER OP INC	7/6/2001	3002535486
DHC-2958	Lea	SUN PEARL FEDERAL #004, SUN PEARL FEDERAL , QUAIL RIDGE;YATES, SOUTH , PEARL;QUEEN	CONCHO RESOURCES, INC.	9/20/2001	3002531047
DHC-3075	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #102	SDG RESOURCES, L.P.	11/21/2002	3002511134
DHC-3076	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #103, COOPER JAL UNIT	SDG RESOURCES, L.P.	11/21/2002	3002511135
DHC-3077	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #104, COOPER JAL UNIT	SDG RESOURCES, L.P.	11/21/2002	3002511138
DHC-3078	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #105, COOPER JAL UNIT	SDG RESOURCES, L.P.	11/21/2002	3002511147
DHC-3079	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #114, COOPER JAL UNIT	SDG RESOURCES, L.P.	11/21/2002	3002509559
DHC-3080	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #119, COOPER JAL UNIT	SDG RESOURCES, L.P.	11/21/2002	3002511144
DHC-3081	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #229, COOPER JAL UNIT	SDG RESOURCES, L.P.	11/21/2002	3002509647
DHC-3082	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #420, COOPER JAL UNIT	SDG RESOURCES, L.P.	11/21/2002	3002533458
DHC-3172	Lea	VACUUM;GRAYBURG-SAN ANDRES , LEA KG STATE #004, LEA KG STATE , CORBIN;QUEEN	MACK ENERGY CORP	8/13/2003	3002533063
DHC-3191	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #102, COOPER JAL UNIT	SDG RESOURCES, L.P.	9/17/2003	3002511134

Exhibit C-2: List of Approved YATES-7 RVRs-QUEEN-GRAYBURG DHC Orders in Lea County, NM

Order Number	County	Entity	Operator	Order Date	API Number(s)
DHC-3280	Lea	STEVENS A 35 COM #004, STEVENS A 35 COM , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	DOYLE HARTMAN	5/13/2004	3002526267
DHC-3281	Lea	MEXICO E COM #002, MEXICO E COM , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	DOYLE HARTMAN	5/14/2004	3002509225
DHC-3282	Lea	MEXICO E COM #003, MEXICO E COM , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	DOYLE HARTMAN	5/14/2004	3002509226
DHC-3283	Lea	MEXICO E COM #005, MEXICO E COM , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	DOYLE HARTMAN	5/14/2004	3002509228
DHC-3350	Lea	WEST EUMONT UNIT #502, EUNICE MONUMENT;GRAYBURG-SAN ANDRES, EUMONT;YATES-7 RVRs-QUEEN (OIL)	FINLEY RESOURCES INC	9/30/2004	3002504413
DHC-3378	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS) , COOPER JAL UNIT #408, COOPER JAL UNIT	SDG RESOURCES, L.P.	12/22/2004	3002532856
DHC-3379	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS) , COOPER JAL UNIT #128, COOPER JAL UNIT	SDG RESOURCES, L.P.	12/22/2004	3002511151
DHC-3380	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS) , COOPER JAL UNIT #106, COOPER JAL UNIT	SDG RESOURCES, L.P.	12/22/2004	3002511137
DHC-3381	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #202, COOPER JAL UNIT	SDG RESOURCES, L.P.	12/22/2004	3002511148
DHC-3402	Lea	R L BRUNSON TR 2 #007, R L BRUNSON TR 2 , PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL)	PECOS PRODUCTION COMPANY	2/16/2005	3002536925
DHC-3403	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #403	SDG RESOURCES, L.P.	2/16/2005	3002532286
DHC-3409	Lea	PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL) , ELLIOTT B FEDERAL #004	ZIA ENERGY INC	3/2/2005	3002510090
DHC-3410	Lea	R L BRUNSON TR 2 #006, R L BRUNSON TR 2 , PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL)	PECOS PRODUCTION COMPANY	3/2/2005	3002536316
DHC-3425	Lea	PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL) , ELLIOTT B FEDERAL #002	ZIA ENERGY INC	3/30/2005	3002510077
DHC-3445	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #141, COOPER JAL UNIT	SDG RESOURCES, L.P.	5/9/2005	3002511292
DHC-3448	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #140	SDG RESOURCES, L.P.	5/9/2005	3002509662
DHC-3449	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #117	SDG RESOURCES, L.P.	5/9/2005	3002511140
DHC-3459	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #227	SDG RESOURCES, L.P.	6/6/2005	3002511291
DHC-3460	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #130, COOPER JAL UNIT	SDG RESOURCES, L.P.	6/6/2005	3002509643
DHC-3485	Lea	SNAPPER STATE #006, SNAPPER STATE , HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	7/1/2005	3002501257
DHC-3495	Lea	HUME;QUEEN, WEST , HUME;GRAYBURG, WEST , CARP STATE #001, CARP STATE	MACK ENERGY CORP	7/1/2005	3002537270
DHC-3496	Lea	PRE-ONGARD WELL #001, HUME;QUEEN, WEST , HUME;GRAYBURG, WEST , GAR STATE	MACK ENERGY CORP	7/1/2005	3002501264
DHC-3497	Lea	SNAPPER STATE #002, HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	7/1/2005	3002537300
DHC-3498	Lea	SNAPPER STATE #003, HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	7/1/2005	3002537301
DHC-3499	Lea	SNAPPER STATE #004, HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	7/1/2005	3002537302
DHC-3500	Lea	SNAPPER STATE #005, HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	7/1/2005	3002520427
DHC-3530	Lea	WC;GRAYBURG (GAS)DO NOT USE , TROUT STATE #001, TROUT STATE , MESA QUEEN (EDDY)	MACK ENERGY CORP	8/12/2005	3002537156
DHC-3531	Lea	TROUT STATE #002, MESA;QUEEN (ASSOC) , ANDERSON RANCH;GRAYBURG, WEST	MACK ENERGY CORP	8/12/2005	3002537157
DHC-3532	Lea	TROUT STATE #004, MESA;QUEEN (ASSOC) , ANDERSON RANCH;GRAYBURG, WEST	MACK ENERGY CORP	8/12/2005	3002537159
DHC-3533	Lea	TROUT STATE #003, MESA;QUEEN (ASSOC) , ANDERSON RANCH;GRAYBURG, WEST	MACK ENERGY CORP	8/12/2005	3002537158
DHC-3554	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #209, COOPER JAL UNIT	SDG RESOURCES, L.P.	8/17/2005	3002509635
DHC-3559	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #115, COOPER JAL UNIT	SDG RESOURCES, L.P.	9/1/2005	3002509566
DHC-3560	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #110, COOPER JAL UNIT	SDG RESOURCES, L.P.	9/1/2005	3002511143
DHC-3569	Lea	SIMMONS #003, SIMMONS , PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL)	RANGE OPERATING NEW MEXICO LLC	10/18/2005	3002534043
DHC-3582	Lea	SNAPPER STATE #012, SNAPPER STATE #011, SNAPPER STATE #010, SNAPPER STATE #009, SNAPPER STATE #008, SNAPPER STATE #007C, SNAPPER STATE , HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	10/28/2005	3002537338, 3002537339, 3002537340, 3002537341, 3002537477, 3002537478
DHC-3591	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #420	SDG RESOURCES, L.P.	11/17/2005	3002533458

Exhibit C-2: List of Approved YATES-7 RVRs-QUEEN-GRAYBURG DHC Orders in Lea County, NM

Order Number	County	Entity	Operator	Order Date	API Number(s)
DHC-3592	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #421, COOPER JAL UNIT	SDG RESOURCES, L.P.	11/17/2005	3002533459
DHC-3599	Lea	HUME;QUEEN, WEST , HUME;GRAYBURG, WEST , GAR STATE #006, GAR STATE	MACK ENERGY CORP	11/30/2005	3002537371
DHC-3601	Lea	NEW MEXICO G-21 STATE #036, NEW MEXICO G-21 STATE , EUMONT;YATES-7 RVRs-QUEEN (OIL) , ARROWHEAD;GRAYBURG	HORSESHOE OPERATING INC.	12/13/2005	3002536577
DHC-3628	Lea	HUME;QUEEN, WEST , HUME;GRAYBURG, WEST , ANGLER STATE #001	NADEL AND GUSSMAN PERMIAN, LLC	1/23/2006	3002537569
DHC-3723	Lea	POGO NAPA #002, POGO NAPA , HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	6/13/2006	3002537672
DHC-3752	Lea	HUME;QUEEN, WEST , HUME;GRAYBURG, WEST , ANGLER STATE #002, ANGLER STATE	NADEL AND GUSSMAN PERMIAN, LLC	7/25/2006	3002537874
DHC-3789	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS) , C E LAMUNYON #023, C E LAMUNYON	POGO PRODUCING CO	9/12/2006	3002522402
DHC-3790	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS) , C E LAMUNYON #078, C E LAMUNYON	POGO PRODUCING CO	9/12/2006	3002536188
DHC-3791	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS) , C E LAMUNYON #032, C E LAMUNYON	POGO PRODUCING CO	9/12/2006	3002522472
DHC-3799	Lea	SNAPPER STATE #017, SNAPPER STATE , HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	9/18/2006	3002537812
DHC-3800	Lea	HUME;QUEEN, WEST , HUME;GRAYBURG, WEST , GAR STATE #003, GAR STATE	MACK ENERGY CORP	9/18/2006	3002537337
DHC-3851	Lea	NEW MEXICO AA STATE #007, NEW MEXICO AA STATE , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	PLANTATION OPERATING LLC	2/5/2007	3002537955
DHC-3889	Lea	PENROSE SKELLY;GRAYBURG , EVA OWEN #001, EVA OWEN , EUMONT;YATES-7 RVRs-QUEEN (OIL)	JOHN H HENDRIX CORP	5/17/2007	3002509999
DHC-3910	Lea	STATE A A/C 2 #044, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	PETROHAWK OPERATING COMPANY	6/25/2007	3002508797
DHC-3911	Lea	STATE A A/C 1 #016, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	PETROHAWK OPERATING COMPANY	6/22/2007	3002509309
DHC-3913	Lea	STATE A A/C 1 #029, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	PETROHAWK OPERATING COMPANY	6/25/2007	3002509310
DHC-3915	Lea	STATE A A/C 1 #092, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	PETROHAWK OPERATING COMPANY	6/25/2007	3002509317
DHC-3981	Lea	RATTLETRAP #001, RATTLETRAP , MESA;QUEEN (ASSOC) , ANDERSON RANCH;GRAYBURG, WEST	BC OPERATING, INC.	12/11/2007	3002538373
DHC-3992-A	Lea	TP STATE #001, TP STATE , LOVINGTON;QUEEN, NORTH , LOVINGTON;GRAYBURG-SAN ANDRES	MACK ENERGY CORP	5/12/2008	3002538582
DHC-4055	Lea	SNAPPER STATE #015H, SNAPPER STATE , HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	7/24/2008	3002538497
DHC-4056	Lea	HUME;QUEEN, WEST , HUME;GRAYBURG, WEST , GAR STATE #005G, GAR STATE	MACK ENERGY CORP	7/24/2008	3002538494
DHC-4057	Lea	SNAPPER STATE #016I, SNAPPER STATE , HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	7/24/2008	3002538498
DHC-4058	Lea	SNAPPER STATE #013B, SNAPPER STATE , HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	7/24/2008	3002538495
DHC-4059	Lea	SNAPPER STATE #014A, SNAPPER STATE , HUME;QUEEN, WEST , HUME;GRAYBURG, WEST	MACK ENERGY CORP	7/24/2008	3002538496
DHC-4060	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #501, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	7/24/2008	3002538180
DHC-4061	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #502, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	7/24/2008	3002538188
DHC-4062	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #503, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	7/24/2008	3002538330
DHC-4063	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #504, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	7/24/2008	3002538189
DHC-4064	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #505, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	7/24/2008	3002538263
DHC-4065	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #509, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	7/24/2008	3002538202
DHC-4066	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #506, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	7/24/2008	3002538201
DHC-4067	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #507, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	7/24/2008	3002538269
DHC-4068	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #508, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	7/24/2008	3002538270
DHC-4078	Lea	HUME;QUEEN, WEST , HUME;GRAYBURG, WEST , CEBO STATE #001, CEBO STATE	NADEL AND GUSSMAN PERMIAN, LLC	8/27/2008	3002538954
DHC-4089	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #511, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	10/30/2008	3002539104
DHC-4090	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #512, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	10/30/2008	3002539103
DHC-4091	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #514, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	10/30/2008	3002539102
DHC-4092	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #515, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	10/30/2008	3002539101
DHC-4093	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #516A, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	10/30/2008	3002539100

Exhibit C-2: List of Approved YATES-7 RVRs-QUEEN-GRAYBURG DHC Orders in Lea County, NM

Order Number	County	Entity	Operator	Order Date	API Number(s)
DHC-4094	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #517, COOPER JAL UNIT	TORCH ENERGY SERVICES, INC.	10/30/2008	3002539099
DHC-4161	Lea	MARTIN B #004, LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	ENERVEST OPERATING L.L.C.	3/6/2009	3002538883
DHC-4162	Lea	NEW MEXICO AA STATE #008, LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	ENERVEST OPERATING L.L.C.	3/6/2009	3002538701
DHC-4163	Lea	STEVENS B #008, LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	ENERVEST OPERATING L.L.C.	3/6/2009	3002538766
DHC-4164	Lea	STEVENS A 35 COM #005, LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	ENERVEST OPERATING L.L.C.	3/6/2009	3002538765
DHC-4164-A	Lea	STEVENS A 35 COM #005, LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	ENERVEST OPERATING L.L.C.	3/16/2009	3002538765
DHC-4214	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #237, COOPER JAL UNIT	RESACA OPERATING COMPANY	10/25/2009	3002509610
DHC-4235	Lea	SUNRISE 25 STATE #001, SUNRISE 25 STATE , BYERS;YATES (GAS) , BOWERS;SEVEN RIVERS	CHI OPERATING INC	11/23/2009	3002539007
DHC-4259	Lea	RHODES;YATES-SEVEN RIVERS (GAS) , LEONARD;QUEEN, SOUTH , C T BATES #004	ENERVEST OPERATING L.L.C.	2/12/2010	3002534404
DHC-4260	Lea	RHODES;YATES-SEVEN RIVERS (GAS) , LEONARD;QUEEN, SOUTH , C T BATES #001	ENERVEST OPERATING L.L.C.	2/12/2010	3002511969
DHC-4339	Lea	PEARSALL;QUEEN , MALJAMAR;GRAYBURG-SAN ANDRES , CAPROCK MALJAMAR UNIT #208, CAPROCK MALJAMAR UNIT	SANDRIDGE EXPLORATION AND PRODUCTION, LLC	12/27/2010	3002533084
DHC-4341	Lea	WILDCAT G07 S183231J;CISCO-CANYON , WILDCAT G-01 S173320N;Y-7R-QU , MALJAMAR;GRAYBURG-SAN ANDRES , CAPROCK MALJAMAR UNIT #149, CAPROCK MALJAMAR UNIT	SANDRIDGE EXPLORATION AND PRODUCTION, LLC	12/27/2010	3002532925
DHC-4358	Lea	STATE A A/C 2 #048, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	3/21/2011	3002508845
DHC-4359	Lea	STATE A A/C 2 #003, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	3/21/2011	3002508829
DHC-4360	Lea	STATE A A/C 2 #024, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	3/21/2011	3002508833
DHC-4361	Lea	STATE A A/C 2 #052, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	3/21/2011	3002508859
DHC-4362	Lea	STATE A A/C 2 #025, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	3/21/2011	3002508834
DHC-4363	Lea	STATE A A/C 2 #054, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	3/21/2011	3002508841
DHC-4364	Lea	STATE A A/C 2 #078, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	3/21/2011	3002534910
DHC-4365	Lea	STATE A A/C 2 #033, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	3/21/2011	3002508793
DHC-4394	Lea	STATE A A/C 2 #001, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508849
DHC-4395	Lea	STATE A A/C 2 #070, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002528279
DHC-4396	Lea	STATE A A/C 2 #031, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508856
DHC-4397	Lea	STATE A A/C 2 #034, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508794
DHC-4398	Lea	STATE A A/C 2 #046, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508800
DHC-4399	Lea	STATE A A/C 2 #004, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508853
DHC-4400	Lea	STATE A A/C 2 #047, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508798
DHC-4401	Lea	STATE 157 G #002, STATE 157 G , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508787
DHC-4402	Lea	STATE 157 G #004, STATE 157 G , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508790
DHC-4403	Lea	STATE A A/C 2 #007, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508830
DHC-4404	Lea	STATE A A/C 2 #029, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508854
DHC-4405	Lea	STATE A A/C 2 #002, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508791
DHC-4406	Lea	STATE A A/C 2 #028, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	5/29/2011	3002508792
DHC-4410	Lea	STATE A A/C 1 #045, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	6/29/2011	3002509259
DHC-4419	Lea	STATE A A/C 1 #043, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	7/11/2011	3002509236
DHC-4420	Lea	STATE A A/C 1 #061, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	7/11/2011	3002509232
DHC-4421	Lea	STATE A A/C 1 #064, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	7/11/2011	3002509230
DHC-4422	Lea	STATE A A/C 1 #065, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	7/11/2011	3002509394

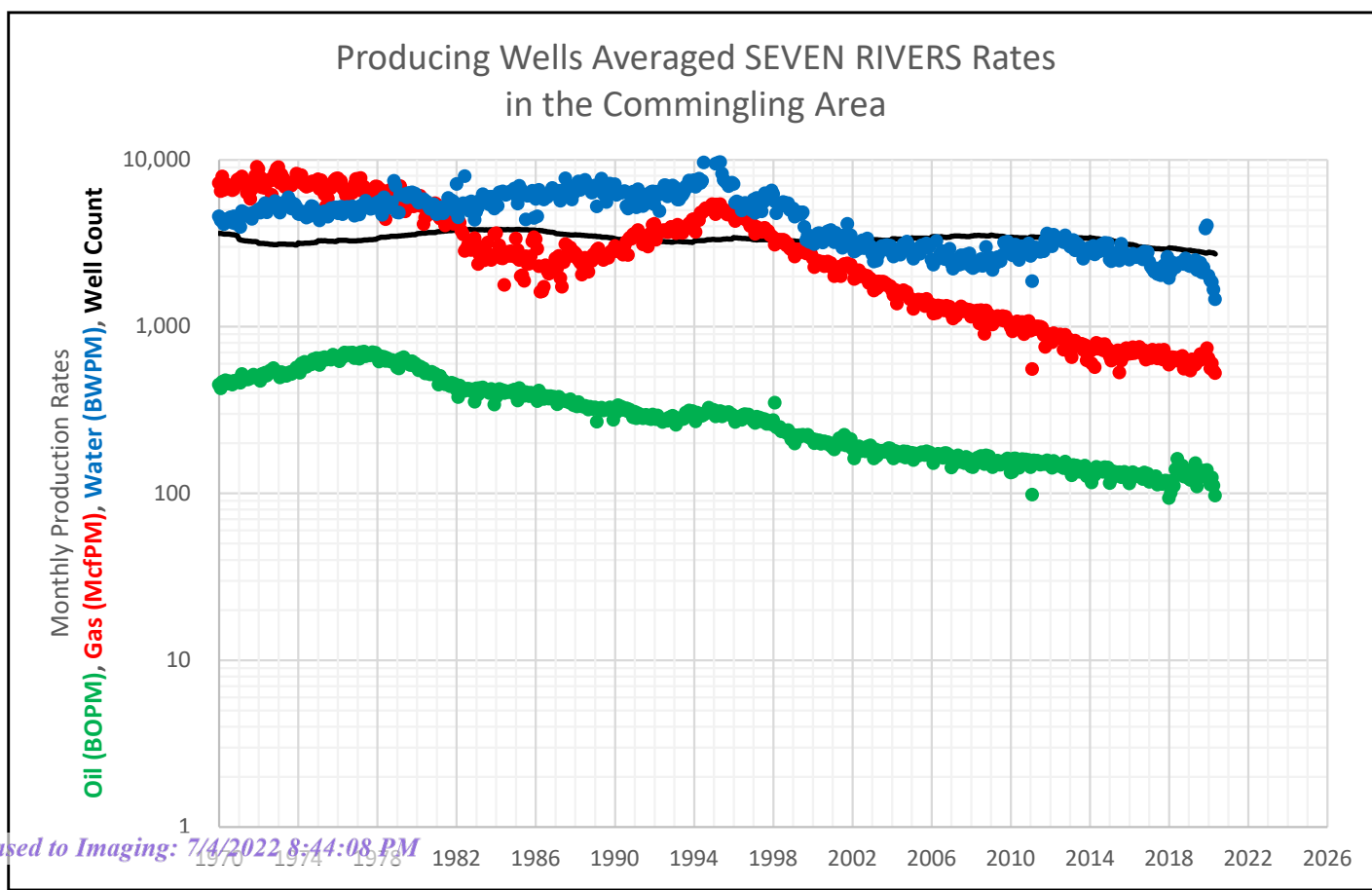
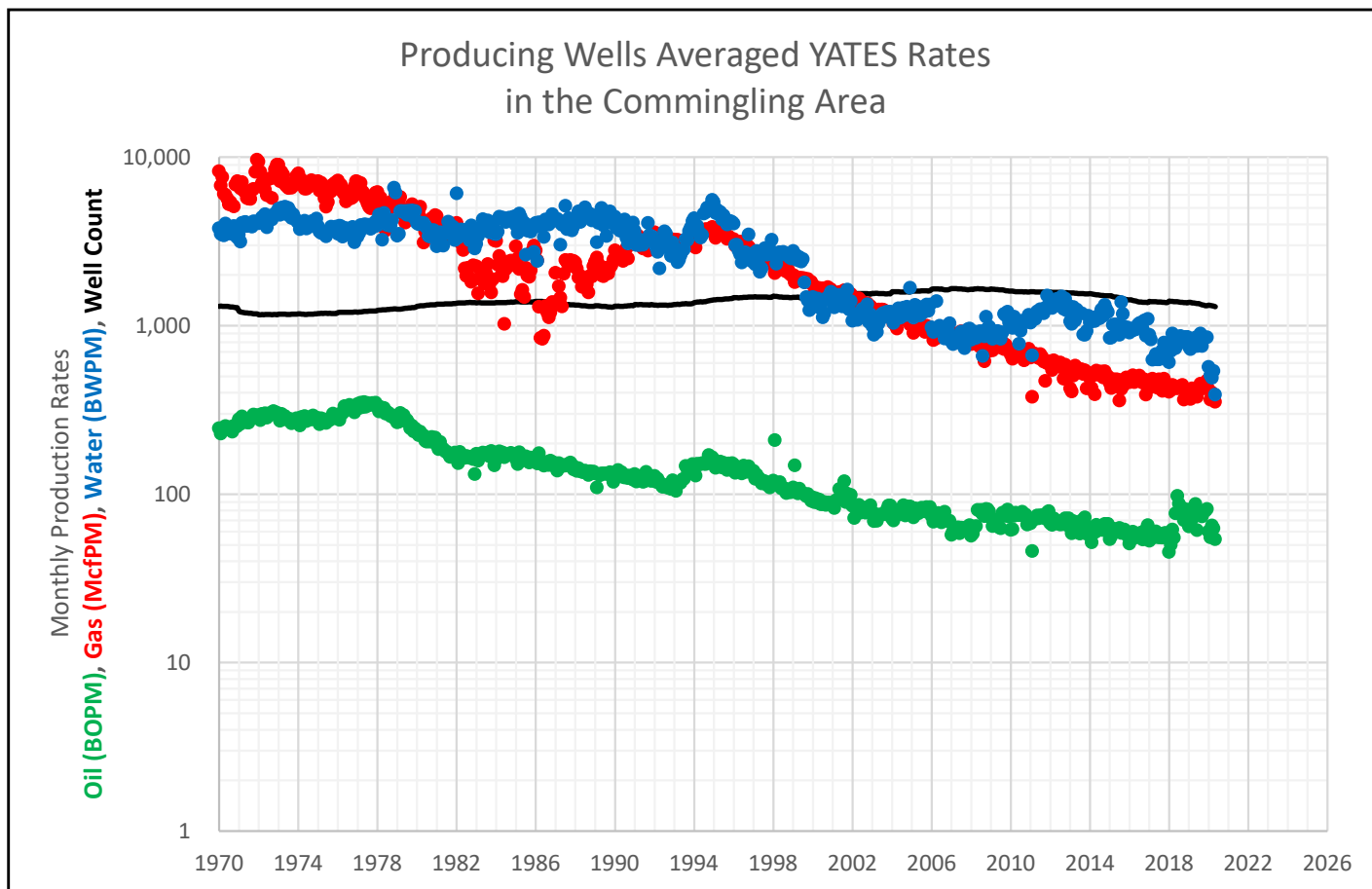
Exhibit C-2: List of Approved YATES-7 RVRs-QUEEN-GRAYBURG DHC Orders in Lea County, NM

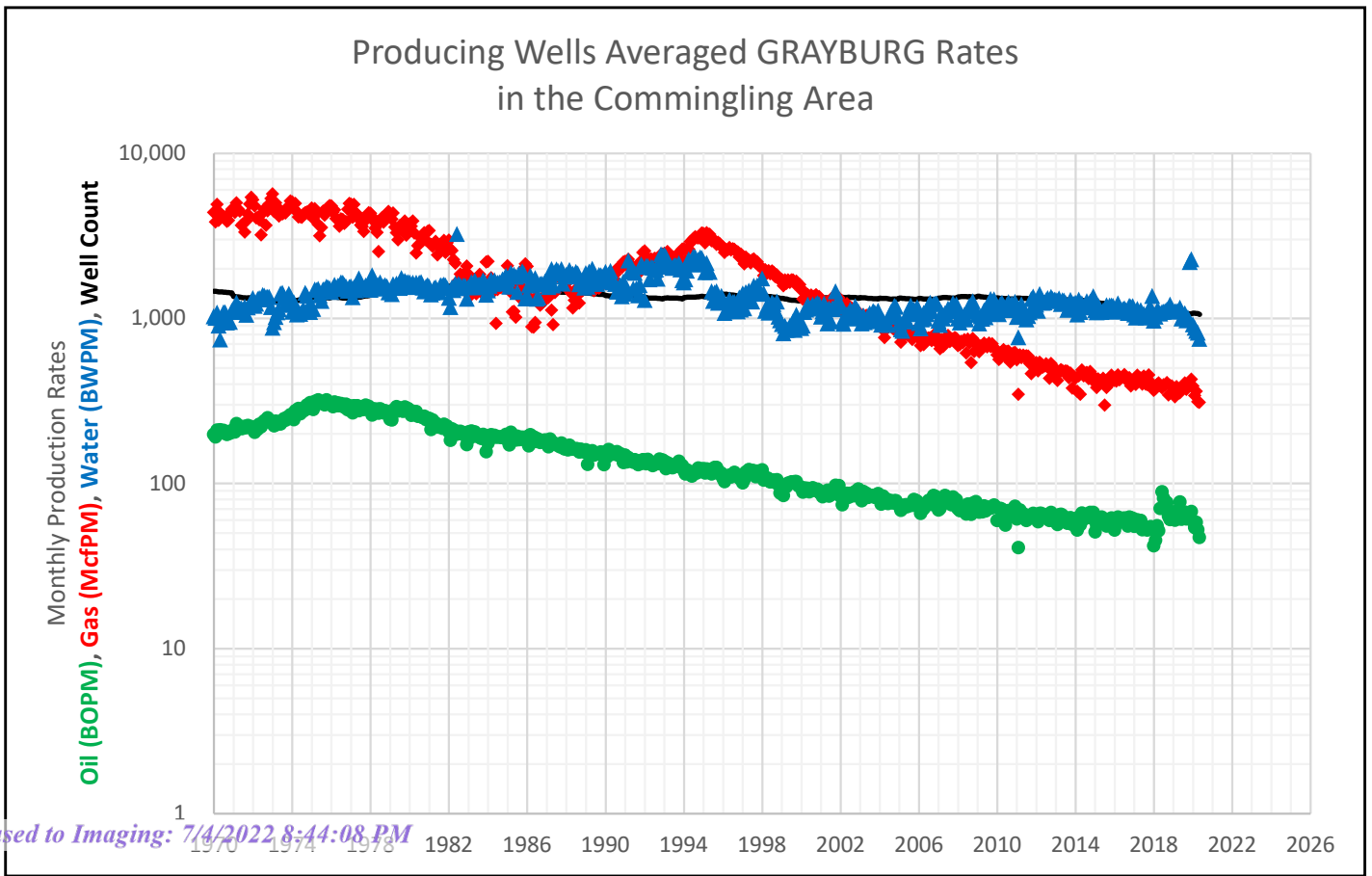
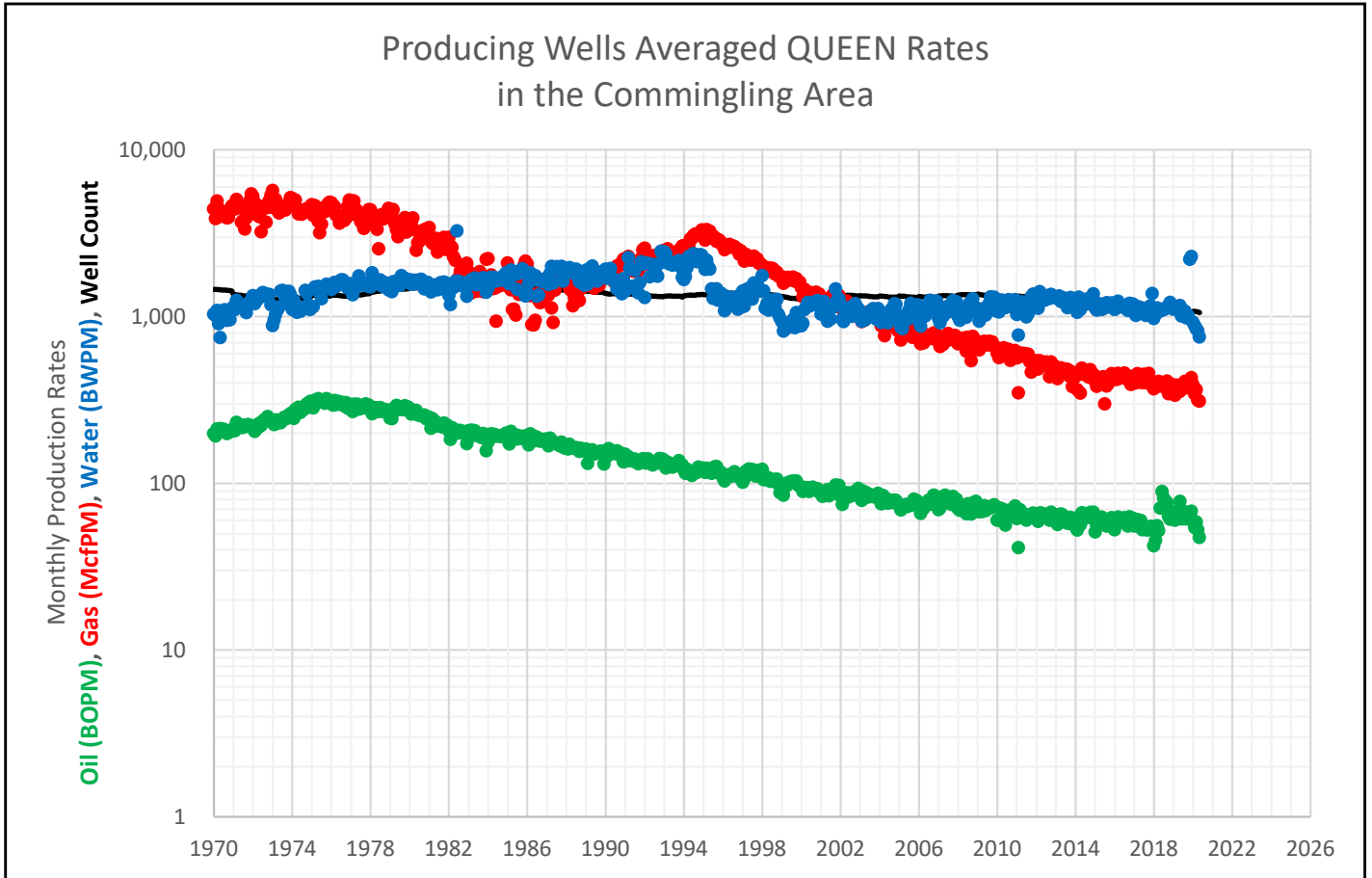
Order Number	County	Entity	Operator	Order Date	API Number(s)
DHC-4423	Lea	STATE A A/C 1 #073, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	7/11/2011	3002509396
DHC-4424	Lea	STATE A A/C 1 #090, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	7/11/2011	3002510722
DHC-4426	Lea	STATE A A/C 1 #069, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	7/11/2011	3002509229
DHC-4429	Lea	STATE A A/C 1 #080, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	7/19/2011	3002510724
DHC-4431	Lea	STATE A A/C 1 #084, JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	7/19/2011	3002509397
DHC-4441	Lea	STATE A A/C 2 #026, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	8/19/2011	3002508835
DHC-4442	Lea	STATE A A/C 2 #027, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	8/19/2011	3002508789
DHC-4443	Lea	STATE A A/C 2 #067, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	8/19/2011	3002528276
DHC-4444	Lea	STATE A A/C 2 #075, STATE A A/C 2 , JALMAT;TAN-YATES-7 RVRs (GAS) , EUNICE;SEVEN RIVERS-QUEEN, SOUTH	MERIT ENERGY COMPANY, LLC	8/19/2011	3002534791
DHC-4503	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #127, COOPER JAL UNIT	RESACA OPERATING COMPANY	1/21/2012	3002509637
DHC-4518	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #123, COOPER JAL UNIT	RESACA OPERATING COMPANY	3/6/2012	3002511150
DHC-4519	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #139, COOPER JAL UNIT	RESACA OPERATING COMPANY	3/6/2012	3002509661
DHC-4520	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #154, COOPER JAL UNIT	RESACA OPERATING COMPANY	3/6/2012	3002526284
DHC-4521	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #129	RESACA OPERATING COMPANY	3/7/2012	3002511152
DHC-4522	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #147	RESACA OPERATING COMPANY	3/7/2012	3002511166
DHC-4540	Lea	STUART 9 #001, STUART 9 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	SABER OIL & GAS VENTURES, LLC	4/4/2012	3002525615
DHC-4541	Lea	STATE A A/C 1 #107, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/4/2012	3002520975
DHC-4542	Lea	STATE A A/C 1 #074, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/4/2012	3002509348
DHC-4543	Lea	STATE A A/C 1 #072, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/4/2012	3002509395
DHC-4544	Lea	STATE A A/C 1 #071, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/4/2012	3002509347
DHC-4545	Lea	STATE A A/C 1 #050, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/4/2012	3002509405
DHC-4546	Lea	STATE A A/C 1 #052, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/4/2012	3002509406
DHC-4547	Lea	STATE A A/C 1 #054, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/4/2012	3002509409
DHC-4548	Lea	STATE A A/C 1 #057, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/4/2012	3002509344
DHC-4549	Lea	STATE A A/C 1 #060, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/4/2012	3002509345
DHC-4550	Lea	STATE A A/C 1 #066, STATE A A/C 1 , LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/4/2012	3002509346
DHC-4562	Lea	WILDCAT;DELAWARE , VACUUM;GRAYBURG-SAN ANDRES , RAVEN STATE #002, RAVEN STATE , E-K;YATES-SEVEN RIVERS-QUEEN	MACK ENERGY CORP	5/9/2012	3002537581
DHC-4677	Lea	STATE 35 #005, MALJAMAR;GRAYBURG-SAN ANDRES , CORBIN;QUEEN	MACK ENERGY CORP	6/5/2014	3002530548
DHC-4710	Lea	PENROSE SKELLY;GRAYBURG , EUNICE;SAN ANDRES, SOUTHWEST , EUMONT;YATES-7 RVRs-QUEEN (OIL) , COLE STATE #017	Grizzly Operating, LLC	11/7/2014	3002537399
DHC-4715	Lea	PENROSE SKELLY;GRAYBURG , EUNICE;SAN ANDRES, SOUTHWEST , EUMONT;YATES-7 RVRs-QUEEN (OIL) , COLE STATE #019	Grizzly Operating, LLC	11/12/2014	3002537400
DHC-4716	Lea	PENROSE SKELLY;GRAYBURG , EUNICE;SAN ANDRES, SOUTHWEST , EUMONT;YATES-7 RVRs-QUEEN (OIL) , COLE STATE #014	Grizzly Operating, LLC	11/12/2014	3002523828
DHC-4717	Lea	PENROSE SKELLY;GRAYBURG , EUNICE;SAN ANDRES, SOUTHWEST , EUMONT;YATES-7 RVRs-QUEEN (OIL) , COLE STATE #018	Grizzly Operating, LLC	11/13/2014	3002537827
DHC-4719	Lea	PENROSE SKELLY;GRAYBURG , EUMONT;YATES-7 RVRs-QUEEN (OIL) , COLE STATE #010	Grizzly Operating, LLC	11/14/2014	3002522163
DHC-4792	Lea	STATE A A/C 1 #128, LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (GAS)	MERIT ENERGY COMPANY, LLC	4/22/2016	3002534876
DHC-4809	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #601	LEGACY RESERVES OPERATING, LP	6/19/2015	3002541762
DHC-4810	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #602	LEGACY RESERVES OPERATING, LP	6/19/2015	3002541763
DHC-4811	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #603	LEGACY RESERVES OPERATING, LP	6/19/2015	3002541764
DHC-4812	Lea	LANGLIE MATTIX;7 RVRs-Q-GRAYBURG , JALMAT;TAN-YATES-7 RVRs (OIL) , COOPER JAL UNIT #604	LEGACY RESERVES OPERATING, LP	6/19/2015	3002541765

Exhibit C-2: List of Approved YATES-7 RVRS-QUEEN-GRAYBURG DHC Orders in Lea County, NM

Order Number	County	Entity	Operator	Order Date	API Number(s)
DHC-5086	Lea	MARTIN B #003, LANGLIE MATTIX;7 RVRS-Q-GRAYBURG, JALMAT;TAN-YATES-7 RVRS (GAS)	FAE II Operating LLC	12/2/2020	3002537959
DHC-5087	Lea	WINNINGHAM #009, JALMAT;TAN-YATES-7 RVRS (GAS), 37240	FAE II Operating LLC	11/10/2020	3002528637
DHC-5088	Lea	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG, JALMAT;TAN-YATES-7 RVRS (GAS), ARNOTT RAMSAY NCT-B #006	FAE II Operating LLC	12/7/2020	3002526278
DHC-5099	Lea	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG, JALMAT;TAN-YATES-7 RVRS (GAS), HARRISON #002	FAE II Operating LLC	12/16/2020	3002525825
DHC-5100	Lea	AIRPORT #002, 79240, 37240	FAE II Operating LLC	12/16/2020	3002535198
DHC-5102	Lea	LANEHART 22 #001, JALMAT;TAN-YATES-7 RVRS (OIL), 37240	FAE II Operating LLC	12/16/2020	3002525742
DHC-5109	Lea	JALMAT;TAN-YATES-7 RVRS (OIL), ARNOTT RAMSAY NCT-B #010, 37240	FAE II Operating LLC	1/25/2021	3002526962
DHC-5114	Lea	HARRISON FEDERAL WB #001, 79240, 37240	FAE II Operating LLC	3/29/2021	3002511805
DHC-5115	Lea	SANTA FE FEDERAL #001, JALMAT;TAN-YATES-7 RVRS (GAS), 37240	FAE II Operating LLC	3/8/2021	3002526563
DHC-5116	Lea	JALMAT;TAN-YATES-7 RVRS (GAS), DABBS #003, 37240	FAE II Operating LLC	2/4/2021	3002529579
DHC-5117	Lea	RHODES;YATES-SEVEN RIVERS (GAS), C T BATES #004, 38760	FAE II Operating LLC	2/5/2021	3002534404
DHC-5121	Lea	JALMAT;TAN-YATES-7 RVRS (OIL), ARNOTT RAMSEY A #006, 37240	FAE II Operating LLC	7/17/2021	3002535329
DHC-5122	Lea	JALMAT;TAN-YATES-7 RVRS (OIL), DYER #002, 37240	FAE II Operating LLC	7/2/2021	3002511854
DHC-5123	Lea	DYER #003, 79240, 37240	FAE II Operating LLC	7/2/2021	3002511855
DHC-5124	Lea	R O GREGORY #003, JALMAT;TAN-YATES-7 RVRS (GAS), 37240	FAE II Operating LLC	7/17/2021	3002511874
DHC-5125	Lea	STEELER A #001, 79240, 37240	FAE II Operating LLC	7/2/2021	3002510805
DHC-5126	Lea	STEELER A #004, JALMAT;TAN-YATES-7 RVRS (GAS), 37240	FAE II Operating LLC	7/2/2021	3002528044
DHC-5127	Lea	WELLS B 1 #001, JALMAT;TAN-YATES-7 RVRS (GAS), 37240	FAE II Operating LLC	7/17/2021	3002509718
DHC-5128	Lea	WINNINGHAM #001, LANGLIE MATTIX;7 RVRS-Q-GRAYBURG, JALMAT;TAN-YATES-7 RVRS (GAS)	FAE II Operating LLC	2/22/2021	3002511842
DHC-5130	Lea	ARNOTT RAMSAY NCT-B #003, 79240, 37240	FAE II Operating LLC	12/22/2021	3002511863
DHC-5131	Lea	JALMAT;TAN-YATES-7 RVRS (OIL), ARNOTT RAMSAY NCT-B #012, 37240	FAE II Operating LLC	12/22/2021	3002527551
DHC-5135	Lea	EMERY KING NW #004, 79240, 37240	FAE II Operating LLC	12/8/2021	3002509192
DHC-5136	Lea	EMERY KING SE #003, 79240, 37240	FAE II Operating LLC	12/22/2021	3002509196
DHC-5137	Lea	JALMAT;TAN-YATES-7 RVRS (GAS), CAGLE C #005, 37240	FAE II Operating LLC	12/8/2021	3002534450
DHC-5138	Lea	CAGLE C FEDERAL COM #006, 83810, 38760	FAE II Operating LLC	12/8/2021	3002537342
DHC-5139	Lea	RHODES FEDERAL UNIT #096, 83810, 38760	FAE II Operating LLC	12/8/2021	3002524536
DHC-5140	Lea	RHODES FEDERAL UNIT #098, 83810, 38760	FAE II Operating LLC	12/8/2021	3002537514
DHC-5141	Lea	RHODES FEDERAL UNIT #047, 83810, 37240	FAE II Operating LLC	12/8/2021	3002520011
DHC-5142	Eddy	RHODES FEDERAL UNIT #102, 83810, 38760	FAE II Operating LLC	12/8/2021	3002524537
DHC-5147	Lea	MYERS B #006, 79240, 37240	FAE II Operating LLC	12/8/2021	3002531382
DHC-5148	Lea	STEVENS A 35 COM #002, 79240, 37240	FAE II Operating LLC	12/8/2021	3002509467
DHC-5162	Eddy	C E LAMUNYON #090, 79240, 37240	FAE II Operating LLC	12/20/2021	3002537924

Exhibit C-3 – Historical Production of YATES-7 RVRS-QUEEN-GRAYBURG Zones





Historical Production from Last 5 Years for Each Pool & Combined Future Forecast, cont.

Producing Wells Averaged GRAYBURG Rates in the Commingling Area					Synthetic Decline Curve			
Date	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)	Well Count	Month	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)
7/1/2016	62	458	1,154	1158	1	346.7	3,504	7,012
8/1/2016	59	442	1,125	1157	2	345.1	3,495	6,989
9/1/2016	55	418	1,084	1153	3	343.4	3,486	6,966
10/1/2016	63	438	1,196	1151	4	341.8	3,477	6,943
11/1/2016	62	391	1,181	1149	5	340.2	3,469	6,920
12/1/2016	62	415	1,189	1145	6	338.5	3,460	6,897
1/1/2017	55	409	1,059	1126	7	336.9	3,451	6,875
2/1/2017	58	399	1,016	1120	8	335.3	3,443	6,852
3/1/2017	61	454	1,147	1116	9	333.7	3,434	6,829
4/1/2017	58	435	1,081	1113	10	332.1	3,426	6,807
5/1/2017	60	437	1,127	1110	11	330.5	3,417	6,785
6/1/2017	53	401	1,047	1108	12	328.9	3,409	6,762
7/1/2017	55	449	1,068	1107	13	327.4	3,400	6,740
8/1/2017	54	401	1,014	1106	14	325.8	3,392	6,718
9/1/2017	52	399	1,046	1105	15	324.2	3,383	6,696
10/1/2017	54	456	1,141	1103	16	322.7	3,375	6,674
11/1/2017	55	414	1,160	1100	17	321.1	3,366	6,652
12/1/2017	53	395	1,371	1100	18	319.6	3,358	6,630
1/1/2018	42	369	972	1124	19	318.1	3,349	6,608
2/1/2018	46	376	1,029	1122	20	316.6	3,341	6,587
3/1/2018	56	400	1,123	1123	21	315.0	3,333	6,565
4/1/2018	52	408	1,108	1118	22	313.5	3,324	6,543
5/1/2018	71	392	1,076	1115	23	312.0	3,316	6,522
6/1/2018	89	381	1,100	1107	24	310.6	3,308	6,500
7/1/2018	82	398	1,102	1106	25	309.1	3,300	6,479
8/1/2018	78	396	1,110	1103	26	307.6	3,291	6,458
9/1/2018	77	409	1,138	1100	27	306.1	3,283	6,437
10/1/2018	64	345	1,133	1095	28	304.7	3,275	6,415
11/1/2018	61	394	1,216	1091	29	303.2	3,267	6,394
12/1/2018	67	391	1,143	1087	30	301.8	3,259	6,373
1/1/2019	61	378	1,105	1093	31	300.3	3,250	6,352
2/1/2019	60	337	1,105	1091	32	298.9	3,242	6,331
3/1/2019	66	388	1,111	1090	33	297.4	3,234	6,311
4/1/2019	69	353	1,111	1086	34	296.0	3,226	6,290
5/1/2019	78	355	1,165	1081	35	294.6	3,218	6,269
6/1/2019	61	383	1,005	1080	36	293.2	3,210	6,249
7/1/2019	65	375	1,012	1076	37	291.8	3,202	6,228
8/1/2019	67	408	1,077	1070	38	290.4	3,194	6,208
9/1/2019	61	372	979	1069	39	289.0	3,186	6,187
10/1/2019	66	388	1,015	1067	40	287.6	3,178	6,167
11/1/2019	66	398	2,199	1065	41	286.3	3,170	6,147
12/1/2019	68	429	2,288	1064	42	284.9	3,162	6,126
1/1/2020	59	392	923	1074	43	283.5	3,154	6,106
2/1/2020	54	343	883	1074	44	282.2	3,146	6,086
3/1/2020	58	364	843	1071	45	280.8	3,139	6,066
4/1/2020	53	314	822	1069	46	279.5	3,131	6,046
5/1/2020	47	311	754	1058	47	278.1	3,123	6,026
6/1/2020	51	354	793	1057	48	276.8	3,115	6,007
7/1/2020	50	365	903	1052	49	275.5	3,107	5,987
8/1/2020	54	387	903	1049	50	274.2	3,100	5,967
9/1/2020	54	368	931	1047	51	272.9	3,092	5,948
10/1/2020	53	356	883	1033	52	271.6	3,084	5,928
11/1/2020	55	363	955	1022	53	270.3	3,076	5,909
12/1/2020	51	366	961	1019	54	269.0	3,069	5,889
1/1/2021	48	332	841	1022	55	267.7	3,061	5,870
2/1/2021	28	254	577	1017	56	266.4	3,053	5,851
3/1/2021	44	289	823	1013	57	265.1	3,046	5,831
4/1/2021	43	267	788	1011	58	263.9	3,038	5,812
5/1/2021	50	349	857	1007	59	262.6	3,031	5,793
6/1/2021	46	376	834	1005	60	261.3	3,023	5,774
7/1/2021	52	360	897	1037				
8/1/2021	53	356	932	1036				
9/1/2021	52	399	794	1033				
10/1/2021	56	424	829	1024				
12/1/2021	58	400	771	1013				

Zone Allocation Rates

	OIL (bbls)	GAS (Mcf)	WATER (bbls)	POOL
5 yr Cum	10,083	149,663	229,030	YATES
Allocated %	42%	64%	47%	
Daily IP Rate	5.5	82.0	125.4	
5 yr Cum	7,280	38,043	130,207	SEVEN RIVERS
Allocated %	30%	16%	27%	
Daily IP Rate	4.0	20.8	71.3	
5 yr Cum	3,466	22,749	61,983	QUEEN
Allocated %	14%	10%	13%	
Daily IP Rate	1.9	12.5	33.9	
5 yr Cum	3,466	22,749	61,983	GRAYBURG
Allocated %	14%	10%	13%	
Daily IP Rate	1.9	12.5	33.9	