

DATE IN 5/3/06	SUSPENSE	ENGINEER MIKE STAGNER	LOGGED IN 5/3/06	TYPE SD	APP NO. pTDS0612360632
----------------	----------	-----------------------	------------------	---------	------------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☒ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Ocean Munds-Dry Ocean Munds-Dry Attorney 5-3-06
 Print or Type Name Signature Title Date
 omundsdry@hollandhart.com
 e-mail Address

2006 MAY 3 PM 3 24



May 3, 2006

HAND-DELIVERED

Mark E. Fesmire, P.E.
Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re: Application of Petrohawk Operating Company for administrative approval of infill gas wells and simultaneous dedication of State "A" A/C 2 Well No. 95, 1980' FNL and 1780' FWL, State "A" A/C 2 Well No. 94, 1930' FSL and 660' FWL, S8-T22S-R36E, Jalmat Gas Pool, Lea County, New Mexico.

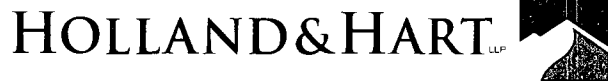
Dear Mr. Fesmire:

Pursuant to the provisions of Rule 4(B) of the Special Pool Rules for the Jalmat Gas Pool, as promulgated by Division Order No. R-8170-P dated December 14, 2001, Petrohawk Operating Company ("Petrohawk") hereby seeks an administrative exception to the gas well density provisions of Rule 3(C) and authorization to simultaneously dedicate said wells to the 600-acre spacing and proration unit originally approved by Order No. R-9073, dated December 14, 1989, as amended by Order NSP-1878 (SD), dated October 19, 2004.

Petrohawk seeks approval of the following wells in Section 8, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico:

The State "A" A/C 2 Well No. 95 to be drilled at a standard location 1980 feet from the North line and 1780 feet from the West line (Unit F); and

The State "A" A/C 2 Well No. 94 to be drilled 1930 feet from the South line and 660 feet from the West line (Unit L).



The proposed wells would be drilled within an existing 600-acre gas spacing unit comprised of Section 8. Therefore, Petrohawk also seeks approval to simultaneously dedicate these wells to this spacing unit.

Administrative Order NSL-2816-E (SD), dated January 24, 2002, authorized the simultaneous dedication of the following nine wells to a standard 640-acre gas spacing and proration unit for the Jalmat Gas Pool:

State "A" A/C 2 Well No. 3 (API No. 30-025-08829) located 1980 feet from the North line and East lines (Unit G);

State "A" A/C 2 Well No. 7 (API No. 30-025-08830) located 660 feet from the North and West lines (Unit D) which was re-classified a Jalmat oil well and was omitted from the standard 640-acre gas spacing unit by Order NSP1878 (SD);

State "A" A/C 2 Well No. 24 (API No. 30-025-08833) located 1980 feet from the South line and 660 feet from the East line (Unit I);

State "A" A/C 2 Well No. 25 (API No. 30-025-08835) located 660 feet from the North and East lines (Unit A);

State "A" A/C 2 Well No. 26 (API No. 30-025-08835) located 660 feet from the North line and 1980 feet from the East line (Unit B);

State "A" A/C 2 Well No. 43 (API No. 30-025-08837) located 1650 feet from the North line and 990 feet from the West line (Unit H);

State "A" A/C 2 Well No. 54 (API No. 30-025-08841) located 660 feet from the South line and 1980 feet from the East line (Unit O);

State "A" A/C 2 Well No. 70 (API No. 30-025-28279) located at an unorthodox location 1295 feet from the South and East lines (Unit P) which was approved by Administrative Order NSL-2816-B (SD); and

State "A" A/C 2 Well No. 76 (API No. 30-025-34672) located 1980 feet from the North line and 660 feet from the West line (Unit E).

The proposed wells are necessary to facilitate the recovery of Jalmat gas reserves. Based on the geological discontinuity in the Jalmat the tighter spacing is anticipated to recover reserves, which cannot be recovered from existing wells. The wells will be completed with modern completion and fracture stimulation techniques which will



insure optimal recovery from the discontinuous Yates/Seven Rivers sands. **Exhibit 1** is a Top of Structure Map which shows the proposed well locations in Section 8.

Exhibit 2 shows recovery of incremental reserves by these infill wells has been confirmed by results of work in the field over the last six years. **Exhibit 3** is an economic analysis that shows the proposed wells will be economic. The work of Raptor Resources, Inc. ("Raptor"), Mission Resources Corporation ("Mission") and Petrohawk was reviewed from April of 1999. Detailed information for the 21 Raptor and 12 Mission/Petrohawk completions are listed on **Exhibit 2**. **Exhibit 4** shows the locations for this work. Mission/Petrohawk has drilled five new wells in 2006 that are in various phases of their completions and thus have no production history and therefore are not included in the reserves. The average incremental recovery for these projects is 1055 MMCF. The monthly production data for each of these completions was normalized. The data was then averaged to produced a normalized production curve as shown on **Exhibit 5**. A best fit of the production data from the normalized curve, omitting the less reliable data when the well count drops dramatically results in a EUR of 1005 MMCF. Thus, both methods of reserve analysis results in an average well recovery of a little over 1 BCF.

Exhibits 6 and 7 are cross-sections showing the Yates and Seven Rivers sands vary substantially from well to well in thickness and reservoir quality. Given the variability of the sands, net pay isopach maps have not proven to be useful and are not included. Detailed correlations with newer generation Density-Neutron logs in the Yates and Seven Rivers interval reveal the sands "come and go" and are not blanket reservoirs. Sands that have not adequately produced in the area are expected in each new well bore.

Jalmat producers have been down-spaced on the Petrohawk acreage from 160 acres to 80 acres to 40-acre spacing in several phases since 1989. New gas production and reserves have always been encountered from these efforts, as shown on **Exhibit 8**. Petrohawk concludes that this area of Jalmat Field has such discontinuous sand reservoirs that infill drilling on 40-acre spacing is required to adequately drain the existing reserves.

Exhibits 9 and 10 are the completion data and estimated EUR for the 40-acre locations around the proposed wells. In the NW/4 of Section 8, the Jalmat zone has only produced 475 MMCF, and will make another 30 MMCF in the one economical well on the 160 acres. Both wellbores (#49 and #51) were plugged and abandoned with only a portion of the productive sands treated with a small frac. Their mechanical condition requires one new well to be drilled, State "A" A/C 2 Well No. 95.

In the SW/4 of Section 8 there has only been one Jalmat producer (#37) which made 1,913 MMCF from 1946 to 1998. Petrohawk proposes to drill a new well, State "A" A/C 2 Well No. 94.

HOLLAND & HART^{LLP}



Many of the older wells had only small or no frac treatment and were not perforated or treated in a way to adequately contact every gas-bearing sand. In many cases, the Seven Rivers gas zones were not perforated at all. **Exhibits 9 and 10** show that four of the offsets in Section 8 had fracture treatments exceeding 100,000 # of sand – all but one completed after 1999. The older wells had fracs of only 20,000 to 60,000 # of sand. Petrohawk is using a combination of limited entry perforating and pumping much larger frac jobs (300K#) to insure that the entire Jalmat interval is stimulated. The designed fracture half length is approximately 300 feet. Petrohawk believes it is economically better to drill a new well wherever the old casing integrity is questionable, so that a modern frac job can be done. Careful engineering of the frac job can then assure all potential sands are effectively drained.

Approval of this application will result in the efficient recovery of hydrocarbons, prevent waste and will not violate correlative rights.

Exhibit 11 is a base map displaying the offset operators around Section 8. **Exhibit 12** lists the parties affected by this application as defined by Rule 1210. **Exhibit 13** is an affidavit confirming that notice of this application has been provided in accordance with the provisions of Rule 4(D) and Rule 1210(B) by providing a copy of this application, including all attachments, to the affected parties by certified mail-return receipt requested advising them that if they have an objection to this application it must be filed in writing with the Division's Santa Fe office within twenty (20) days after the filing of this application and proof of notice with the Division.

Exhibit 14 and 15 are OCD Form C-102 depicting the proposed surface locations of the referenced wells.

Also enclosed is a proposed administrative order of the Division.

Sincerely,

Ocean Munds-Dry
Attorney for Petrohawk Operating Company

Enclosures



May 3, 2006

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: Application of Petrohawk Operating Co. for administrative approval of infill gas wells and simultaneous dedication of State "A" A/C 2 Well No. 95, 1980' FNL and 1780' FWL, State "A" A/C 2 Well No. 94, 1930 FSL and 660 FWL, S8-T22S-R36E, Jalmat Gas Pool, Lea County, New Mexico.

Dear Ladies and Gentlemen:

Enclosed is a copy of the above-referenced application which was filed with the New Mexico Oil Conservation Division on this date by Petrohawk Operating Company for administrative approval of infill gas wells and simultaneous dedication for its proposed State "A" A/C 2 Well No. 95 to be drilled at a standard location 1980 feet from the North line and 1780 feet from the West line (Unit F) and the State "A" A/C 2 Well No. 94 to be drilled 1930 feet from the South line and 660 feet from the West line (Unit L), in Section 8, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico. Petrohawk seeks to dedicate these wells to an existing 600-acre gas spacing unit comprising Section 8 which is currently dedicated to the State "A" A/C 2 Well No. 3 (Unit G); the State "A" A/C 2 Well No. 24 (Unit I); State "A" A/C 2 Well No. 25 (Unit A); State "A" A/C 2 Well No. 26 (Unit B); State "A" A/C 2 Well No. 43 (Unit H); State "A" A/C 2 Well No. 54 (Unit O); State "A" A/C 2 Well No. 70 (Unit P); and State "A" A/C 2 Well No. 76 (Unit E).

As an owner of an interest that may be affected by these proposed wells, you may object to this application. Objections must be filed in writing within twenty days from this date at the Division's Santa Fe office that is located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. If no objection is received within this twenty-day period, this application may be approved.

Sincerely,

Ocean Munds-Dry
Attorney for Petrohawk Operating Co.

Enclosures

Attention: Ms. Nancy Gatti

Administrative Order - _____

Dear Ms. Gatti:

Reference is made to your application dated May 3, 2006 for infill gas wells and simultaneous dedication for its proposed State "A" A/C 2 Well No. 95 to be drilled at a standard location 1980 feet from the North line and 1780 feet from the West line (Unit F) and the State "A" A/C 2 Well No. 94 to be drilled 1930 feet from the South line and 660 feet from the West line (Unit L), in Section 8, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico.

The proposed wells will be simultaneously dedicated to an existing 600-acre gas spacing unit comprising Section 8 which is currently dedicated to the State "A" A/C 2 Well No. 3 (Unit G); the State "A" A/C 2 Well No. 24 (Unit I); State "A" A/C 2 Well No. 25 (Unit A); State "A" A/C 2 Well No. 26 (Unit B); State "A" A/C 2 Well No. 43 (Unit H); State "A" A/C 2 Well No. 54 (Unit O); State "A" A/C 2 Well No. 70 (Unit P); and State "A" A/C 2 Well No. 76 (Unit E).

This application has been duly filed under the provisions of the "Special Pool Rules for the Jalmat Gas Pool," as promulgated by Division Order No. R-8170-P, issued in Case No. 12563 on December 14, 2001.

By authority granted me under the provisions of Rules 4(A), (B), and (D) of the special rules governing the Jalmat Gas Pool, the following described wells within this 600-acre spacing unit is hereby approved:

The State A A\C 2 Well No. 95 to be drilled at a standard location 1980 feet from the North line and 1780 feet from the West line (Unit F); and

The State A A/C 2 Well No. 94 to be drilled 1930 feet from the South line and 660 feet from the West line (Unit L).

Further, Petrohawk is hereby authorized to simultaneously dedicate Jalmat gas production from the above-described wells.

Sincerely,

Mark E. Fesmire, P.E.
Director

cc: Oil Conservation Division - Hobbs/Artesia

Jalmat Field - Northern Area

I. New Completions since Raptor became operator in 4/99

8/8ths Initial Rate										8/8ths Cum Prod @ Recompl/Drill Date			8/8ths Incremental Recovery to 12/04			8/8ths Unk Rec		
Lease Name	Well	Location	API	Type	Oil or Gas	Field Name	Status	First Prod Date	Prod Zone Name	Oil (stbd)	Gas (mmcf)	Wtr (stbd)	Oil (mstbs)	Gas (mmcf)	Oil (mstbs)	Gas (mmcf)	Oil (mstbs)	Gas (mmcf)
STATE 157 G	2	5G 22S 36E	30025087970000	Recompl	Gas	JALMAT	Producing	2000/05	TANSILL-YATES-SEVEN RIVERS	5	362	0	0	0	1	115	1	115
STATE 157 G	4	5B 22S 36E	30025087990000	Recompl	Oil	JALMAT	Producing	2000/05	TANSILL-YATES-SEVEN RIVERS	14	406	0	0	0	6	1303	6	1303
STATE A A C 2	2	5L 22S 36E	30025087910000	Recompl	Gas	JALMAT	Producing	2000/11	TANSILL-YATES-SEVEN RIVERS	0	388	0	0	0	0	792	0	792
STATE A A C 2	3	8G 22S 36E	30025088290000	Recompl	Oil	JALMAT	Producing	2003/06	TANSILL-YATES-SEVEN RIVERS	3	177	16	0	0	2	77	2	77
STATE A A C 2	4	9M 22S 36E	30025088530000	Recompl	Gas	JALMAT	Producing	1999/08	TANSILL-YATES-SEVEN RIVERS	0	201	0	0	0	0	1027	0	1027
STATE A A C 2	7	8D 22S 36E	30025088310000	Recompl	Oil	JALMAT	Producing	2004/22	TANSILL-YATES-SEVEN RIVERS	0	54	0	0	0	0	67	0	67
STATE A A C 2	19	7O 22S 36E	30025088250000	Recompl	Gas	JALMAT	Shut-in	1999/11	TANSILL-YATES-SEVEN RIVERS	0	77	17	0	175	0	20	0	195
STATE A A C 2	24	8I 22S 36E	30025088330000	Recompl	Gas	JALMAT	Producing	2000/05	TANSILL-YATES-SEVEN RIVERS	0	136	0	0	0	0	1822	0	1822
STATE A A C 2	25	8A 22S 36E	30025088340000	Recompl	Gas	JALMAT	Producing	2000/05	TANSILL-YATES-SEVEN RIVERS	0	548	7	0	0	0	2893	0	2893
STATE A A C 2	30	9E 22S 36E	30025088550000	Recompl	Gas	JALMAT	Producing	2000/05	TANSILL-YATES-SEVEN RIVERS	0	330	0	0	0	0	2173	0	2173
STATE A A C 2	31	9F 22S 36E	30025088590000	Recompl	Gas	JALMAT	Producing	2003/04	TANSILL-YATES-SEVEN RIVERS	0	172	0	0	0	0	345	0	345
STATE A A C 2	34	5J 22S 36E	30025087940000	Recompl	Gas	JALMAT	Producing	2000/08	TANSILL-YATES-SEVEN RIVERS	2	961	0	0	0	0	3740	0	3740
STATE A A C 2	46	5N 22S 36E	30025088000000	Recompl	Gas	JALMAT	Producing	1999/12	TANSILL-YATES-SEVEN RIVERS	0	452	0	0	0	0	856	0	856
STATE A A C 2	48	9B 22S 36E	30025088450000	Recompl	Gas	JALMAT	Producing	2000/06	TANSILL-YATES-SEVEN RIVERS	0	216	0	0	0	0	1782	0	1782
STATE A A C 2	52	9H 22S 36E	30025088590000	Recompl	Gas	JALMAT	Producing	2003/7	TANSILL-YATES-SEVEN RIVERS	0	91	0	0	0	0	248	0	248
STATE A A C 2	54	8O 22S 36E	30025088410000	Recompl	Gas	JALMAT	Producing	1999/09	TANSILL-YATES-SEVEN RIVERS	0	117	0	0	0	0	365	0	365
STATE A A C 2	75	11J 22S 36E	30025347910000	New Drill	Gas	JALMAT	Producing	2000/11	TANSILL-YATES-SEVEN RIVERS	0	210	0	0	0	0	892	0	892
STATE A A C 2	76	8E 22S 36E	30025346720000	New Drill	Gas	JALMAT	Producing	2001/07	TANSILL-YATES-SEVEN RIVERS	0	203	0	0	0	0	33	0	33
STATE A A C 2	78	5E 22S 36E	30025349100000	New Drill	Oil	JALMAT	Producing	2002/05	TANSILL-YATES-SEVEN RIVERS	2	204	12	0	0	4	222	4	222
STATE A A C 2	79	11D 22S 36E	30025356510000	New Drill	Gas	JALMAT	Producing	2001/07	TANSILL-YATES-SEVEN RIVERS	0	266	0	0	0	0	1989	0	1989
STATE A A C 2	80	11F 22S 36E	30025355670000	New Drill	Gas	JALMAT	Shut-in	Dry Hole	TANSILL-YATES-SEVEN RIVERS	0	0	0	0	0	0	0	0	0
Average:										0	0	0	0	0	1	1039		

II. New Completions since Mission / Petrohawk became operator in 3/2004

8/8ths Initial Rate										8/8ths Cum Prod @ Recompl/Drill Date			8/8ths Incremental Recovery			8/8ths Unk Rec		
Lease Name	Well	Location	API	Type	Oil or Gas	Field Name	Status	First Prod Date	Prod Zone Name	Oil (stbd)	Gas (mmcf)	Wtr (stbd)	Oil (mstbs)	Gas (mmcf)	Oil (mstbs)	Gas (mmcf)	Oil (mstbs)	Gas (mmcf)
STATE A A C 2	1	9N 22S 36E	30025088490000	Add pay & Frac	Gas	JALMAT	Producing	2005/02	TANSILL-YATES-SEVEN RIVERS	0	68	0	0	1034	0	497	0	1531
STATE A A C 2	28	5I 22S 36E	30025087920000	Add pay & Frac	Oil	JALMAT	Producing	2004/06	TANSILL-YATES-SEVEN RIVERS	1	330	0	8	126	0	2092	8	2218
STATE A A C 2	29	8D 22S 36E	30025088540000	Add pay & Frac	Gas	JALMAT	Producing	2005/04	TANSILL-YATES-SEVEN RIVERS	1	129	0	0	315	0	1287	0	1602
STATE A A C 2	33	5O 22S 36E	30025087930000	Add pay & Frac	Gas	JALMAT	Producing	2004/05	TANSILL-YATES-SEVEN RIVERS	0	282	0	0	286	0	2896	0	2982
STATE A A C 2	36	9K 22S 36E	30025088470000	Add pay & Frac	Gas	JALMAT	Producing	2004/07	TANSILL-YATES-SEVEN RIVERS	0	121	0	5	7993	0	772	5	8765
STATE A A C 2	47	5C 22S 36E	30025087980000	Add pay & Frac	Oil	JALMAT	Producing	2005/04	TANSILL-YATES-SEVEN RIVERS	28	140	0	10	155	35	1104	45	1259
STATE A A C 2	67	9K 22S 36E	30025282760000	Add pay & Frac	Gas	JALMAT	Producing	2005/02	TANSILL-YATES-SEVEN RIVERS	0	65	0	2	313	0	588	2	901
STATE A A C 2	70	8P 22S 36E	30025282790000	Add pay & Frac	Gas	JALMAT	Producing	2004/08	TANSILL-YATES-SEVEN RIVERS	0	221	0	0	9	0	1375	0	1384
STATE A A C 2	81	5K 22S 36E	30025358680000	New Drill	Gas	JALMAT	Producing	2005/05	TANSILL-YATES-SEVEN RIVERS	2	252	4	0	0	0	250	0	250
STATE A A C 2	82	11J 22S 36E	30025369360000	New Drill	Gas	JALMAT	Producing	2005/05	TANSILL-YATES-SEVEN RIVERS	0	189	0	0	0	0	1120	0	1120
STATE A A C 2	83	11N 22S 36E	30025369100000	New Drill	Gas	JALMAT	Producing	2005/05	TANSILL-YATES-SEVEN RIVERS	0	91	0	0	0	0	516	0	516
STATE A A C 3	84	11O 22S 36E	30025369350000	New Drill	Gas	JALMAT	Producing	2005/04	TANSILL-YATES-SEVEN RIVERS	0	116	10	0	0	0	701	0	701
STATE A A C 2	85	11A 22S 36E	30025375630000	New Drill	Gas	JALMAT	WO Compl	WO Compl	TANSILL-YATES-SEVEN RIVERS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
STATE A A C 2	86	11G 22S 36E	30025375640000	New Drill	Gas	JALMAT	Producing	2006/04	TANSILL-YATES-SEVEN RIVERS	0	0	Cleaning up after frac	0	0	N/A	N/A	N/A	N/A
STATE A A C 2	87	11H 22S 36E	30025375650000	New Drill	Gas	JALMAT	WO Compl	WO Compl	TANSILL-YATES-SEVEN RIVERS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
STATE A A C 2	88	11I 22S 36E	30025375660000	New Drill	Gas	JALMAT	Producing	2006/04	TANSILL-YATES-SEVEN RIVERS	0	0	Cleaning up after frac	0	0	N/A	N/A	N/A	N/A
State 157 G	5	5H 22S 36E	30025378010000	New Drill	Gas	JALMAT	WO Compl	WO Compl	TANSILL-YATES-SEVEN RIVERS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Average:										0	0	0	0	0	3	1683		
Total Average:															2	1065		

Jalmat - New Drill - Economics Summary Table

Input:

WI = 100 %	RI = 82.5%	
Prod Start Date = Drill Date + 1 mth		
Initial Rate = 242 mcf/d + 0 bopd		
di = 40%		(from normalized type curve)
n = 3.5		(from normalized type curve)
NGL Yield = 138 bbls/mmcft		(from normalized type curve)
1-Gas Shrinkage = 59%		(from plant statements)
Plant Takes = 13% of residue gas & ngl's		(from plant statements)
Gas Price = \$7.40/mcf flat		(contract with plant)
Oil Price = \$55/stb flat		(adj for differentials from NYMEX (-\$.60/mcf))
NGL Price = \$39.05/stb flat		(no oil in economics)
OP Cost = \$1207/well/mth		(71% of Oil)
CWC = 607 M\$		(actuals from los statement)

Results:

8/8ths Reserves = 1005 mmcf
 NPV @ 10% = 1455 M\$
 ROR = 66%
 Payout = 21 mths
 ROI = 9.1

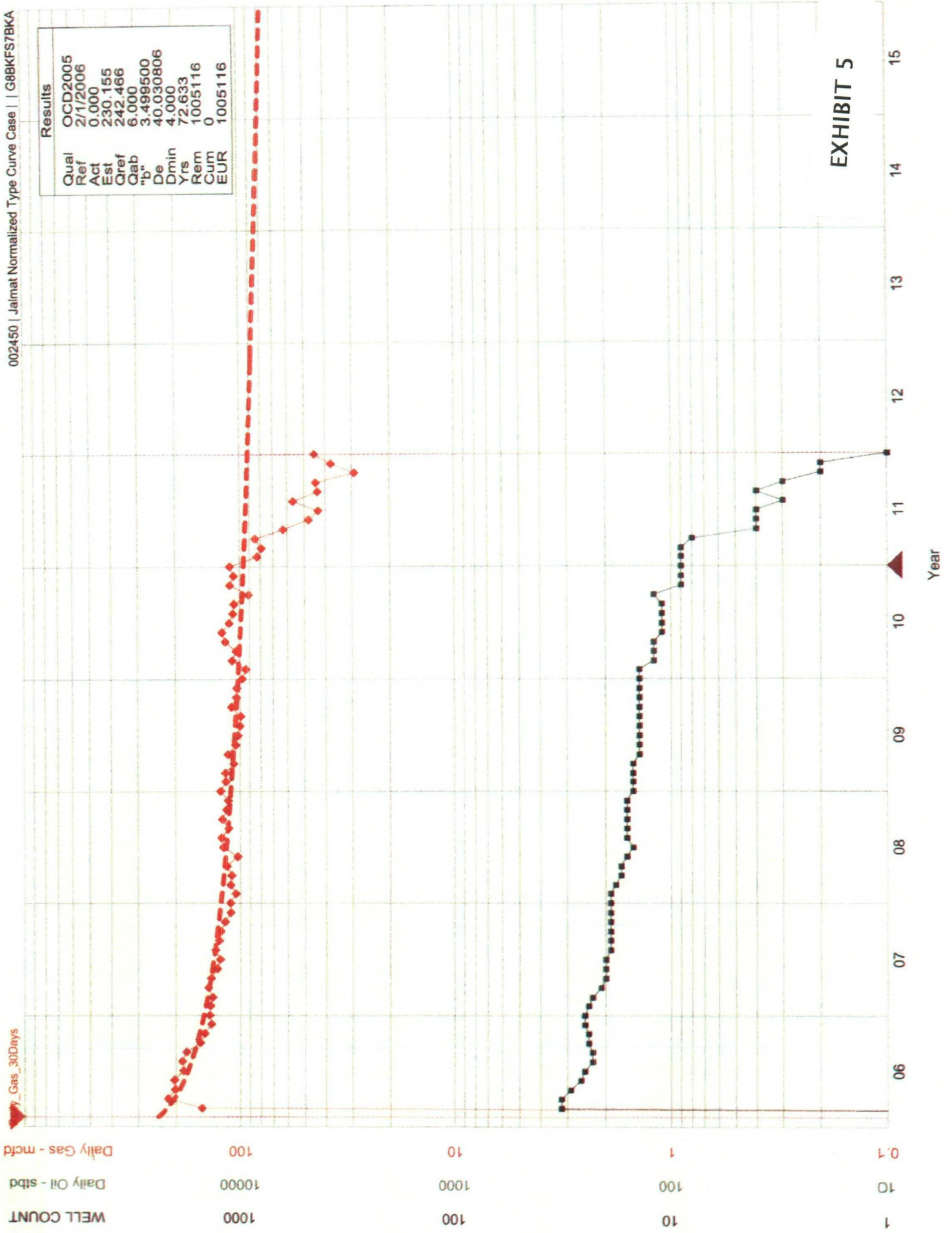
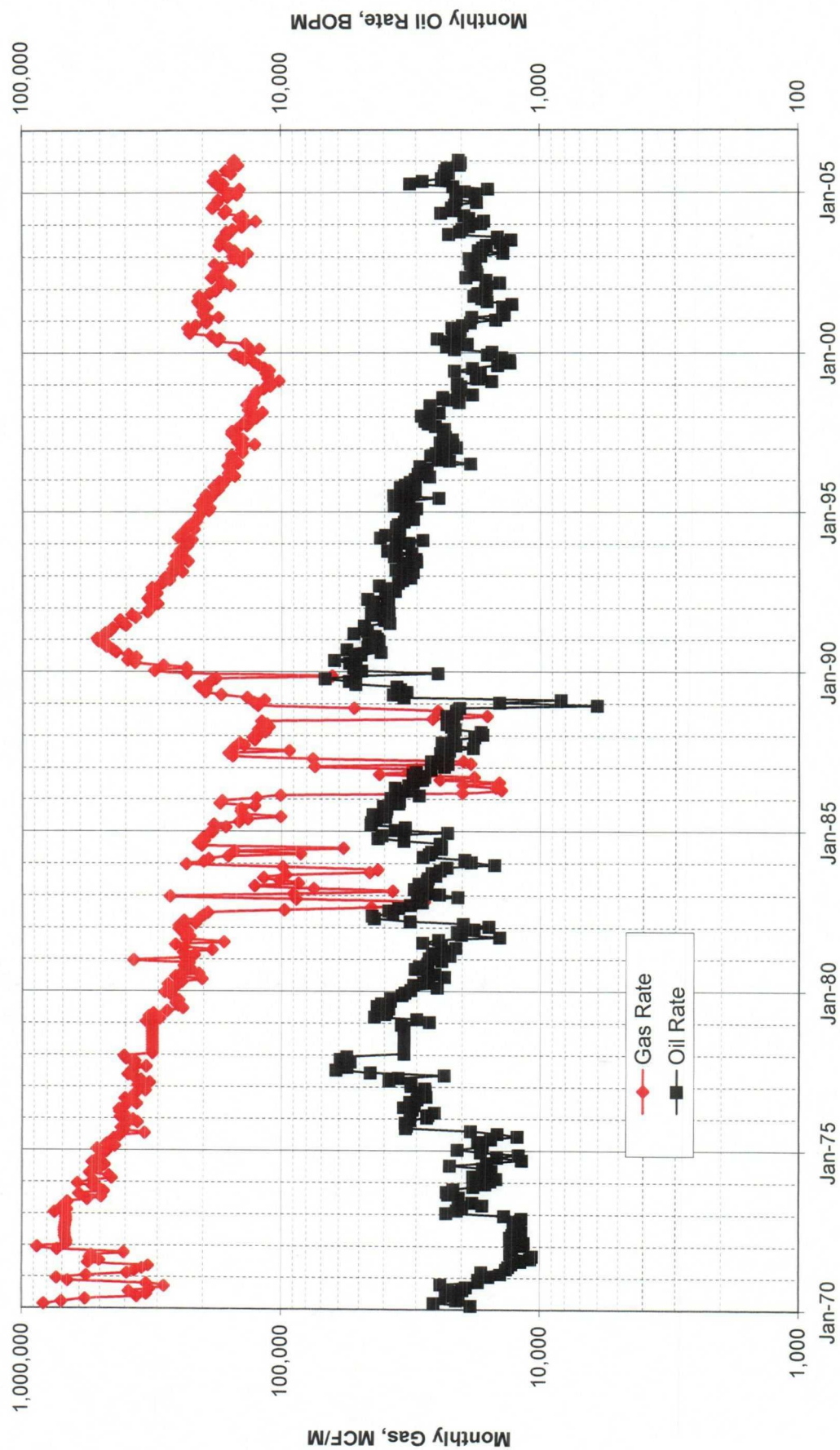


EXHIBIT 5

Petrohawk Leases
Jalmat Field
Lea County, New Mexico



OFFSET JALMAT WELLS FOR PROPOSED NEW WELL AC2 #94 (REDRILL OF AC 2 #58)									
SECTION: 8			SPOT:L		T22S R36E				
JALMAT FIELD, LEA CO, NM									
Well #	Sec/spot	Comp date	Zones	Pay interval	Treatment	Cum MMCF	Cur rate MCFD	Status	EUR
40-acre offsets, Sec 8:									
76	8E	Jul-01	Y	3289-3395	190K# SD	33	4	OIL	33
51	8F	Oct-69	Y	3192-3370	30K# SD	86	0	P&A 9/85	86
37	8K	Dec-46	Y-7R	3200-3684	20K# SD	1913	0	TA 10/98	1913
58	8L	Oct-64	SE			0	0	P&A 12/92	
10	8M	Apr-38	SE			0	0	P&A 6/94	
53	8N	Feb-61	SE			0	0	P&A 6/94	
40-acre offsets, Sec 7:									
11	7H	Apr-52	Y	3150-3285	2KG ACID	0	0	TA 4/94	0
12	7I	Apr-52	Y	3180-3370	NITRO	1865	0	P&A 12/94	1865
8	7P	Jun-62	Y	3160-3218	60K# SD	294	0	P&A 5/03	294
Legend:	T=Tansill								
	Y=Yates								
	7R= Seven Rivers								
	SE= South Eunice Pool								
									rl 4/20/2006

OFFSET JALMAT WELLS FOR NEW WELL AC 2 #95 (REDRILL OF AC 2 #51)									
SECTION: 8			SPOT:F		T22S R36E				
JALMAT FIELD, LEA CO, NM									
Well #	Sec/spot	Comp date	Zones	Pay interval	Treatment	Cum MMCF	Cur rate MCFD	Status	EUR
40-acre offsets, Sec 8:									
26	8B	Jun-90	Y	3154-3321	150K# SD	264	15	GAS	435
49	8C	Apr-65	T-Y	3074-3383	30K# SD	327	0	P&A 6/94	327
7	8D	Oct-03	T-Y	3151-3398	175K# SD	29	28	OIL	67
76	8E	Jul-01	Y	3289-3395	190K# SD	33	4	OIL	33
51	8F	Oct-69	Y	3192-3370	30K# SD	86	0	P&A 9/85	86
3	8G	Jul-03	Y-7R	3162-3622	286K# SD	55	19	OIL	77
56	8J	Sep-61	Y	3182-3353	60K# SD	2493	0	P&A 6/94	2493
61	8J	Jul-70	SE			0	0	TA 7/86	
37	8K	Dec-46	Y-7R	3200-3684	20K# SD	1913	0	TA 10/98	1913
58	8L	Oct-64	SE			0	0	P&A 12/92	
Legend:	T=Tansill								
	Y=Yates								
	7R= Seven Rivers								
	SF= South Eunice Pool								
								rl 4/20/2006	

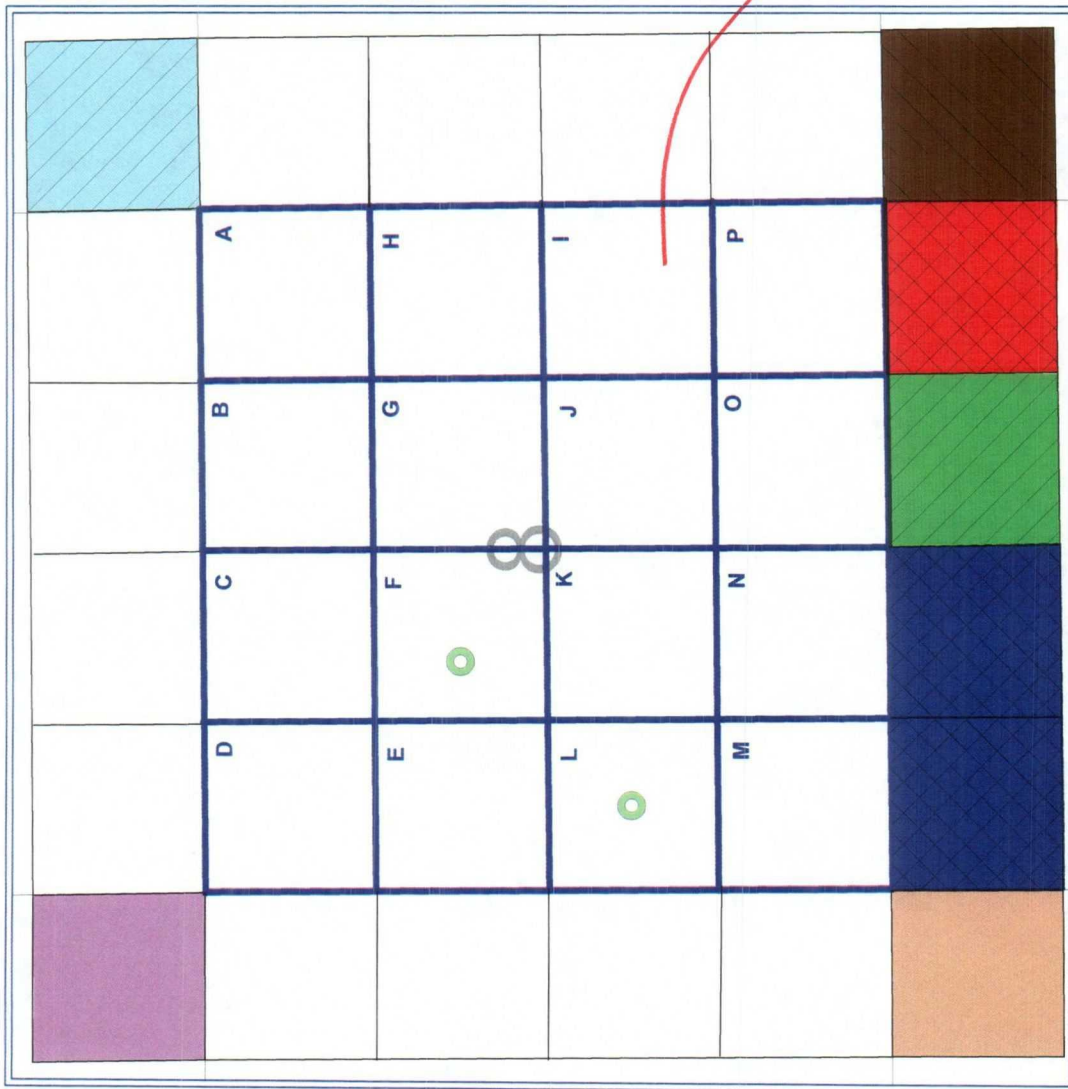
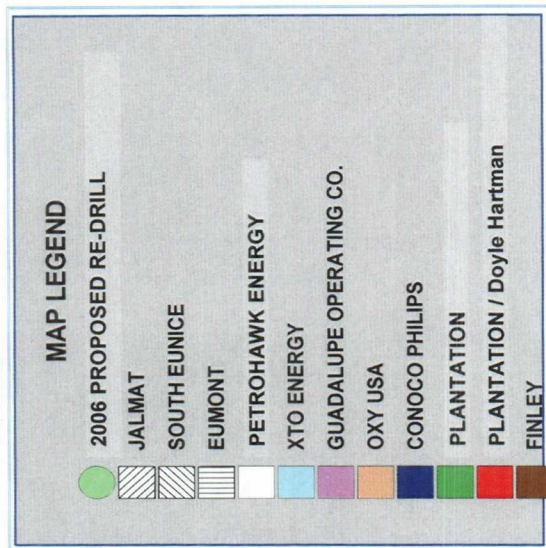


EXHIBIT 11

all of Section 8

see combination State Lease No. A-00983-0004

EXHIBIT 12

Affected Parties

**State A A/C 2 Well No. 95
State A A/C Well No. 94
Section 8, Township 22 South, Range 36 East, NMPM
Lea County, New Mexico.**

XTO Energy, Inc.
810 Houston Street #2000
Fort Worth, TX 76102-6298

OXY USA, Inc.
P. O. Box 4294
Houston, TX 77210-4294

ConocoPhillips
Post Office Box 2197
Houston, TX 77079

Guadalupe Operating Co.
1407 Cuthbert Avenue
Midland, TX 79701

Plantation Operating LLC
2203 Timberwolf Suite 229
The Woodlands, TX 77380

Finley Resources Inc.
1308 Lake Street
Fort Worth, TX 76102

Doyle Hartman
500 N. Main Street
Midland, TX 79701

EXHIBIT 13

**BEFORE THE
OIL CONSERVATION DIVISION
NEW MEXICO ENERGY, MINERALS AND
NATURAL RESOURCES DEPARTMENT**

IN THE MATTER OF THE APPLICATION OF PETROHAWK OPERATING COMPANY FOR ADMINISTRATIVE APPROVAL OF AN INFILL GAS WELL AND SIMULTANEOUS DEDICATION OF STATE "A" A/C 2 WELL NO. 95, 1980' FNL AND 1780' FWL AND STATE "A" A/C 2 WELL NO. 94, 1930' FSL AND 660' FWL, S8-T22S-R36E, JALMAT GAS POOL, LEA COUNTY, NEW MEXICO.

AFFIDAVIT

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

Ocean Munds-Dry, attorney in fact and authorized representative of Petrohawk Operating Company, the Applicant herein, being first duly sworn, upon oath, states that notice of the above-referenced Application was mailed to the addresses shown on Exhibit "12" attached hereto.

Ocean Munds-Dry
Ocean Munds-Dry

SUBSCRIBED AND SWORN to before me this 3rd day of May 2006 by Ocean Munds Dry.



**OFFICIAL SEAL
LISAMARIE ORTIZ
NOTARY PUBLIC-STATE OF NEW MEXICO**
My commission expires 01/14/07

[Signature]
Notary Public

My Commission Expires: January 14, 2007

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

EXHIBIT 14

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 79240	Pool Name JALMAT:TANSILL-YATES-7RIVERS (GAS)
Property Code	Property Name STATE A A/C 2	Well Number 95
OGRID No. 194849	Operator Name PETROHAWK OPERATING COMPANY	Elevation 3595'

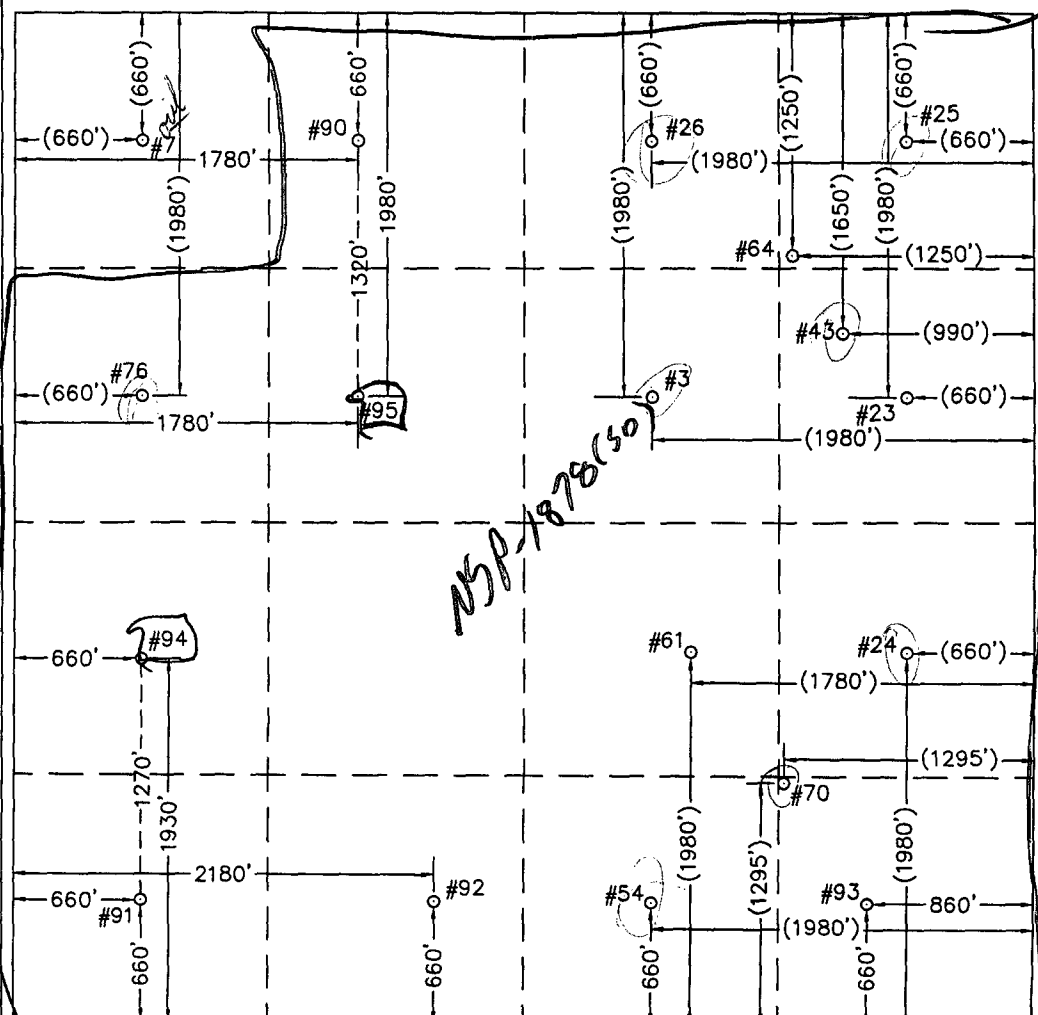
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	8	22 S	36 E		1980	NORTH	1780	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
SAME									
Dedicated Acres	Joint or Infill INFILL	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Nancy K. Gatti</i> Signature</p> <p>NANCY K. GATTI Printed Name</p> <p>REGULATORY MANAGER Title</p> <p>04/28/06 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my upervison and that the same is true and correct to the best of my belief.</p> <p>June 9, 2005 Date Surveyed</p> <p><i>MACON McDONALD</i> Signature & Seal of Professional Surveyor</p> <p>LVA Professional Surveyor</p> <p>W.O. Num. 2005-0467</p> <p>Certificate No. MACON McDONALD 12185</p>
-------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

WELL LOCATIONS SHOWN HEREON WITH DIMENSIONS IN PARENTHESIS WERE PROVIDED BY MISSION RESOURCES CORPORATION AND ARE NOT FIELD SURVEYED.

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

EXHIBIT 15

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
		79240	JALMAT:TANSILL-YATES-7RIVERS (GAS)
Property Code	Property Name		Well Number
	STATE A A/C 2		94
OGRID No.	Operator Name		Elevation
194849	PETROHAWK-OPERATING COMPANY		3598'

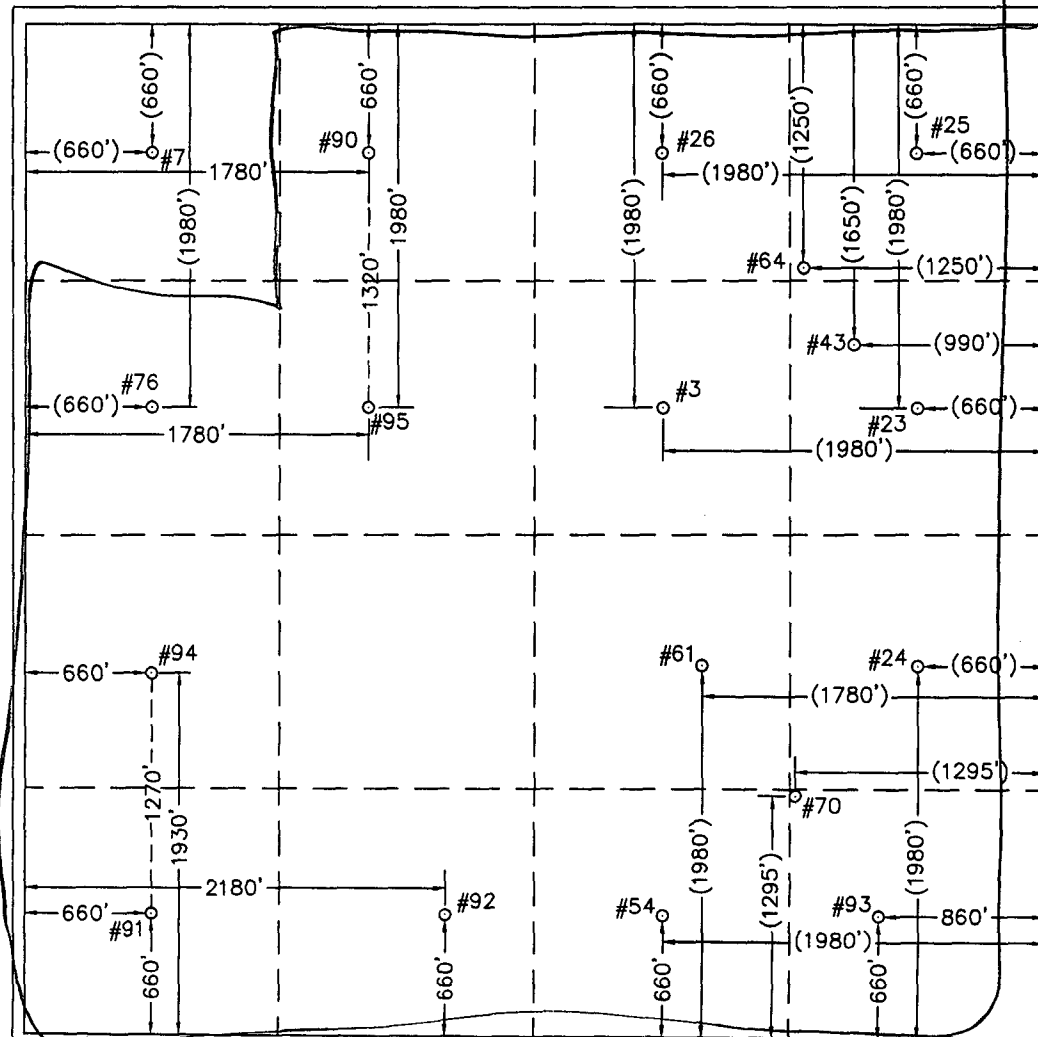
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	8	22 S	36 E		1930	SOUTH	660	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No. SAME	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill INFILL	Consolidation Code			Order No.				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify the the information
contained herein is true and complete to the
best of my knowledge and belief.

Nancy K. Bell
Signature

NANCY K. GATTI

Printed Name _____

REGULATORY MANAGER

Title _____

04/28/06


Date _____

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.

June 9, 2005

Date Surveyed, 11/10/1964 11/10/64

Signature & Seal of 

Professional Surveyor

[Handwritten signature]

100

12185

W.O. Num. 2005-0468

WFO: NARR: 2000-0100

Certificate No. MACON McDONALD 121

WELL LOCATIONS SHOWN HEREON WITH DIMENSIONS IN PARENTHESIS WERE PROVIDED BY MISSION RESOURCES CORPORATION AND ARE NOT FIELD SURVEYED.