

State of New Mexico
Energy, Minerals & Natural Resources

Form C-101
May 27, 2004

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address PETROHAWK OPERATING COMPANY 1100 LOUISIANA, STE. 4400, HOUSTON, TX 77002		² OGRID Number 194849
		³ API Number 30- 025-08838
⁴ Property Code 302433	⁵ Property Name STATE A A/C 2	⁶ Well No. 049
⁹ Proposed Pool 1 JALMAT;TANSILL-YATES-7RIVERS (GAS) #79240		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no. C	Section 8	Township 22S	Range 36E	Lot. Idn	Feet from the 660	North/South Line NORTH	Feet from the 1980	East/West line WEST	County LEA
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⁸ Proposed 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
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Additional Well Location

¹¹ Work Type Code E	¹² Well Type Code G	¹³ Cable/Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3585
¹⁶ Multiple NO	¹⁷ Proposed Depth 3870' TD	¹⁸ Formation 7RIVERS	¹⁹ Contractor To be Determined	²⁰ Spud Date 9/4/06 RE-ENTRY
Depth to ground water		Distance from nearest fresh water well 1000'		Distance from nearest surface water 1000'
Pit: Liner: Synthetic <input type="checkbox"/> _____ mils thick Clay <input type="checkbox"/> Pit Volume _____ bbls Drilling Method: Rotary Closed-Loop System <input checked="" type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12"	8-5/8"	24#	316'	300	SURFACE
7-7/8"	5-1/2"	14#	3775'	250	2347'

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Permit Expires 1 Year From Approval

Date Unless Drilling Underway

Re-Entry

Please see Attached:
Well Location & Acreage Dedication Plat (C-102)
Proposed Well Plan
Current & Proposed Wellbore Schematic

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input type="checkbox"/> a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan.		OIL CONSERVATION DIVISION	
Signature: <i>Nancy K. Gatti</i>		Approved by: <i>Chris Williams</i>	
Printed name: Nancy K. Gatti		Title: <i>OC DISTRICT SUPERVISOR/GENERAL MANAGER</i>	
Title: Regulatory Manager		Approval Date: SEP 11 2006	
E-mail Address: ngatti@petrohawk.com		Expiration Date:	
Date: 08/29/06	Phone: 832-369-2126	Conditions of Approval: Attached <input type="checkbox"/>	

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State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Frances Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-08838	Pool Code 79240	Pool Name JALMAT; TANSILL-YATES-7 RIVERS (GAS)
Property Code 33493 302433	Property Name STATE A A/C2	Well Number 049
OGRID No. 44838 194849	Operator Name PETROHAWK OPERATING COMPANY	Elevation 3585'

Surface Location

UL or lot No. C	Section 8	Township 22 S	Range 36 E	Lot Idn	Feet from the 660	North/South line NORTH	Feet from the 1980	East/West line WEST	County LEA
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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
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Dedicated Acres 600	Joint or Infill INFILL	Consolidation Code	Order No.
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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 information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Nancy K. Gatti</i> Signature Date 9-6-06</p> <p>NANCY K. GATTI Printed Name</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 supervision and that the same is true and correct to the best of my belief.</p> <p>Date of Survey</p> <p>Signature & Seal of Professional Surveyor</p> <p>Certificate No.</p>
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Petrohawk Energy Corporation
Jalmat Field
Lea County, New Mexico

Project: Squeeze Yates perforations and add-pay in the Seven Rivers

Well: State A A/C-2 #49

Procedure:

1. Test pulling unit anchors if they have not been tested within 2 years
2. MIRU PU
3. Install BOP, RU rev unit, PU 4 3/4" bit, DC's on 2 3/8" tbg.
4. Drill out surface plug from 0' to 325'
5. After drill out of surface plug perform a pressure and negative test
6. Continue in hole to CIBP @ 3050' with 35 sx of cement on top, drill out cement and CIBP, anticipate loss of circulation below CIBP, push CIBP to PBTD at 3422', POOH
7. PU 5 1/2" Pkr on 2 3/8" tbg and RIH, set Pkr @ 2700'+/-
8. RU cement company squeeze Yates perforations from 3074' to 3383'
9. Release Pkr and pull up hole
10. WOC overnight
11. POOH and LD Pkr
12. PU 4 3/4" bit & DC's RIH, drill out cement, continue in hole to CIBP @ 3422', Drill out CIBP @ 3422', Expect loss of circulation below CIBP
13. POOH and lay down DC's and bit
14. PU 5 1/2" CIBP on tbg and RIH to 3700'+/- and set, POOH
15. PU 4" X 5 1/2" liner shoe, 1 joint of 4" 9.5# L-80 FL4S liner, 4" float collar, and remainder of 4" 9.5# L-80 FL4S liner
16. Set liner on CIBP @ 3700', RU cementing company, cement liner in place
17. WOC 12 hrs minimum
18. RIH with 3 1/4" bit, slim hole DC's on 2 3/8" tbg and clean to liner collar, circulate hole clean,
19. POOH and lay down, DC's and bit
20. RU wireline co and run cased hole log
21. Add additional pay in the 7 Rivers at 3191', 3230', 3235', 3260', 3281', 3292', 3305', 3320', 3330', 3364', 3382', 3427', 3438', 3440', 3442', 3444', 3490', 3516', 3518', 3520', 3522', 3535', 3538', 3541', 3558', 3570', 3586', 3588', 3590', 3599', 3606', 3608', 3610', 3618', 3620', 3622', 3625', 3630', 3639', 3640', 3642', 3644', 3660', 3666', 3673', 3675' (46 holes).
22. Acidize perms with 2500 gals of 7 1/2% NEFE HCl with PPI tool, POOH with tbg and LD PPI tool
23. Fracture stimulate 7 Rivers perforations.
24. Force close fracture and begin flow back
25. RIH on 2 3/8" production tbg, PU MA and TAC, set TAC, RIH with pump w/GA and rods
26. Pump test well

FORM	TOP																																		
		AAC-2 #49 PROPOSED WELLBORE DIAGRAM MISSION RESOURCES																																	
		SU-T-R 8C-22S-36E POOL: JALMAT; TAN-YATES-7 RVRS (PRO GAS) CO, ST: LEA, NEW MEXICO STATUS: ACTIVE LATEST RIG WORKOVER: DIAGRAM REVISED: 3/2/2006 BY RSL	API #: 30-025-08838-0000 LAND TYPE: STATE ACREAGE 40.12																																
		<div style="float: right; border: 1px solid black; padding: 2px;"> LOG ELEVATION: N/R GROUND ELEVATION: 3,596' KB </div>																																	
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="width: 20%;">CASING</th> <th style="width: 20%;">LINER</th> <th style="width: 20%;">TUBING</th> </tr> </thead> <tbody> <tr> <td>Hole</td> <td>12"</td> <td>7 7/8"</td> <td></td> </tr> <tr> <td>Pipe</td> <td>8 5/8"</td> <td>5 1/2"</td> <td></td> </tr> <tr> <td>Weight</td> <td>24#</td> <td>14#</td> <td></td> </tr> <tr> <td>Grade</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Thread</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Depth</td> <td>316'</td> <td>3,775'</td> <td></td> </tr> <tr> <td>Mud wt</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			CASING	LINER	TUBING	Hole	12"	7 7/8"		Pipe	8 5/8"	5 1/2"		Weight	24#	14#		Grade				Thread				Depth	316'	3,775'		Mud wt			
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		<div style="float: right;"> PROPOSED DO surf plug 0-325' DO cmt & CIBP @ 3,050', push CIBP to PBTD 3,422' Squeeze Yates perfs 3,074-3,383" DO CIBP @ 2,900' & cmt DO CIBP @ 3,422' Set 5 1/2" CIBP @ 3,700' +/- Set 4" liner on CIBP @ 3,700' & cmt in place Run cased hole log Perfs 3,191-3,675' w/38 holes Acidize perfs w/2500 gals 7 1/2% NEFE HCl w/PPI tool Frac 7 Rivers perfs RIH w/2 3/8" tbq, pump & rods Pump test well </div>																																	
		<div style="float: right;"> QUEEN ZONE HISTORY 9/13/60 Spud. 9/16/60 Initial Completion Pool EUNICE; SEVEN RIVERS-QUEEN, SOUTH Perforated OH 3,775-3,870' Vibro-frac 3,855-3860' w/3 charges. Frac w/20,000 gal oil & 20,000# sand IP 113 BOPD, 40 BWPD, 51 MCFPD </div>																																	
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