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|-------------------------|----------|-----------------------|-------------------------|-----------------|---------------------------|
| DATE IN <u>10/30/09</u> | SUSPENSE | ENGINEER <u>Jones</u> | LOGGED IN <u>DLB/09</u> | TYPE <u>DHC</u> | APP NO. <u>0930356877</u> |
|-------------------------|----------|-----------------------|-------------------------|-----------------|---------------------------|

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



Apache
HAWK B-1 #40

ADMINISTRATIVE APPLICATION CHECKLIST 30-035-36533

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.

Sophie Mackay

Print or Type Name

S. Mackay

Signature

Engineering Technician

Title

10/28/2009

Date

sophie.mackay@apachecorp.com
 e-mail Address



October 28, 2009

Richard Ezeanyim
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Application for Downhole Commingle
Hawk B-1 #40 ✓
Unit M, Sec 9, T-21S, R-37E
Penrose Skelly; Grayburg and Hare; San Andres, East Pools
Lea County, New Mexico

Dear Mr. Ezeanyim,

Enclosed please find an administrative application form (C-107A) and attachments for downhole commingling the Grayburg and San Andres in the Hawk B-1 #40. Apache intends to produce both zones together with an expected rate of 10 BOPD, 170 BWPD, and 120 MCFPD. The ownership (WI, NRI and ORRI) of these pools are identical in this wellbore. Downhole commingling in this manner will offer an economic method of production while protecting against reservoir damage, waste of reserves and violation of correlative rights. This is a Federal well. The Bureau of Land Management has been sent a copy of this application, along with a notice of intent to downhole commingle these two zones.

This well was originally completed to the San Andres in 3/2004. It was plugged back to the Grayburg 6/2004. Apache intends to reopen the San Andres and commingle with the existing Grayburg production. Actual tests were used in determining the attached allocation. The attached production curve shows San Andres production from 3/2004 through 5/2004 and Grayburg production from 6/2004 through 8/2009.

If you need additional information or have any questions, please give me a call at (918) 491-4864.

Sincerely,

A handwritten signature in cursive script that reads "Sophie Mackay".

Sophie Mackay
Engineering Technician

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

APPLICATION TYPE
☒ Single Well
☐ Establish Pre-Approved Pools
EXISTING WELLBORE
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

Apache Corporation 6120 S Yale Ave, Suite 1500, Tulsa, OK 74136-4224
Operator Address
Hawk B-1 040 M 9 21S 37E Lea
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 873 Property Code 24427 API No. 30-025-36533 Lease Type: ☒ Federal ☐ State ☐ Fee

| DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
|---|---|-------------------|--|
| Pool Name | Penrose Skelly; Grayburg | | Hare; San Andres, East |
| Pool Code | 50350 | | 96601 |
| Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | 3904' - 4022' (Perf) | | 4150' - 4228' (Perf) |
| Method of Production (Flowing or Artificial Lift) | Artificial Lift | | Artificial Lift |
| Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone) | NA | | NA |
| Oil Gravity or Gas BTU (Degree API or Gas BTU) | 1227 BTU | | 1181 BTU |
| Producing, Shut-In or New Zone | Producing | | Shut In |
| Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.) | Date: Est Rates: 5 BOPD 20 BWPD 60 MCFPD | Date: Rates: | Date: Est Rates: 5 BOPD 150 BWPD 60 MCFPD |
| Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.) | Oil Gas 50 % 50 % | Oil Gas % % | Oil Gas 50 % 50 % |

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No ☐
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☐ No ☐
Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No ☐
Will commingling decrease the value of production? Yes ☐ No ☒
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes ☒ No ☐
NMOCD Reference Case No. applicable to this well: _____

Attachments:
C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
Production curve for each zone for at least one year. (If not available, attach explanation.)
For zones with no production history, estimated production rates and supporting data.
Data to support allocation method or formula.
Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:
List of other orders approving downhole commingling within the proposed Pre-Approved Pools
List of all operators within the proposed Pre-Approved Pools
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.
SIGNATURE Sophie Mackay TITLE Engineering Technician DATE 10/28/2009
TYPE OR PRINT NAME Sophie Mackay TELEPHONE NO. (918) 491-4864
E-MAIL ADDRESS sophie.mackay@apachecorp.com

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Fee Lease - 3 Copies

☐ AMENDED REPORT

| | | | | |
|---|--|---------------------------------|--|------------------------------------|
| ¹ API Number 30-025-36533 | | ² Pool Code 50350 | ³ Pool Name Penrose Skelly; Grayburg | |
| ⁴ Property Code 24427 | ⁵ Property Name Hawk B-1 | | | ⁶ Well Number 040 |
| ⁷ OGRID No. 873 | ⁸ Operator Name Apache Corporation | | | ⁹ Elevation 3510' GR |

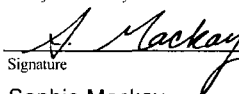
¹⁰ Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the North/South line | Feet from the East/West line | County |
|---------------|---------|----------|-------|---------|--------------------------------|------------------------------|--------|
| M | 9 | 21S | 37E | 1310 | South | 1280 West | Lea |

¹¹ 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 |
|------------------------|------------------|---------------------|-------|------------|---------------|------------------|---------------|----------------|--------|
| "Dedicated Acres 40 | "Joint or 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.

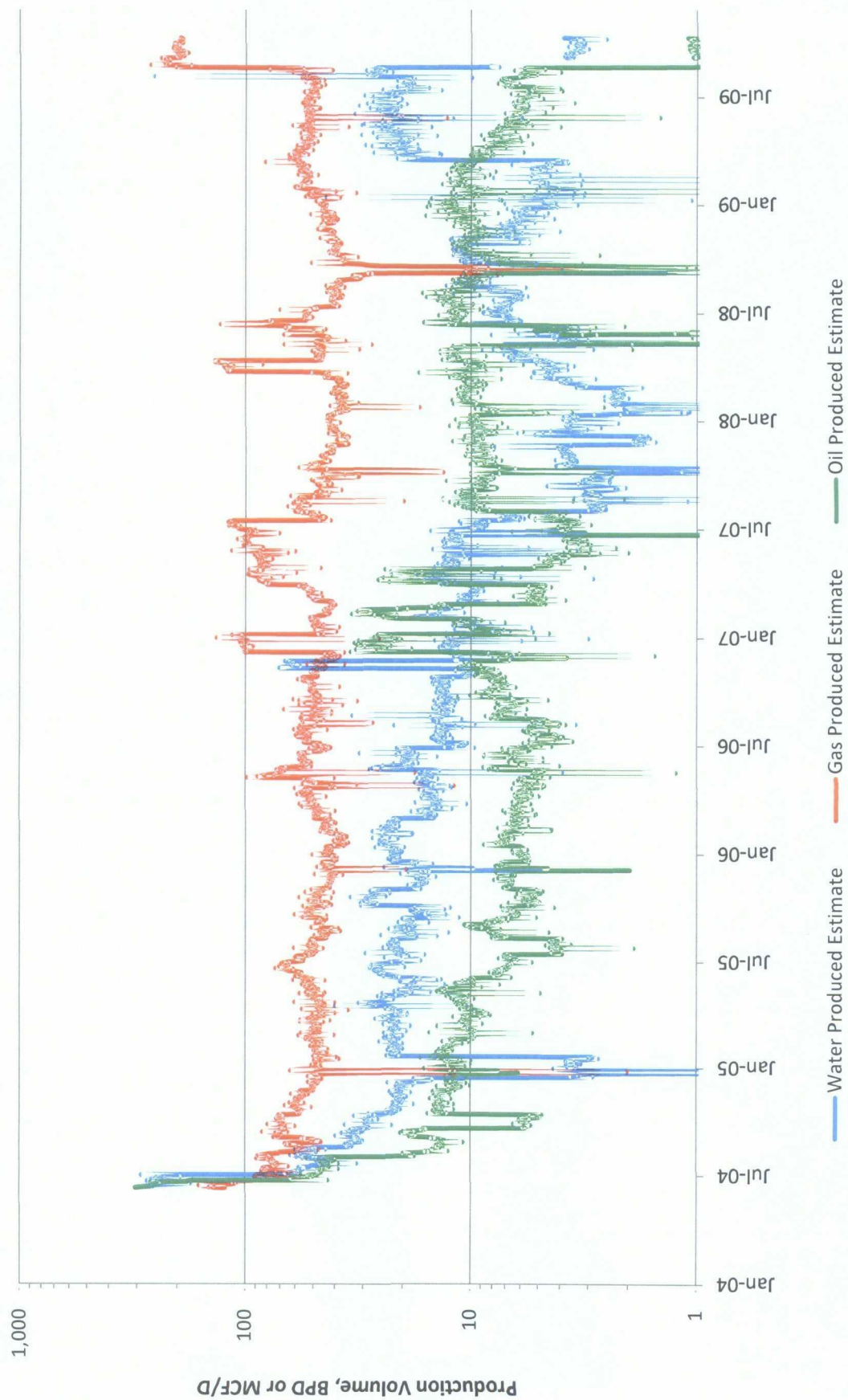
| | | | | |
|-------|-------|--|--|--|
| 16 | | | | <p style="text-align: center;">¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased 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.</i></p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  Signature </div> <div style="text-align: center;"> 10/28/2009 Date </div> </div> <p style="text-align: center;">Sophie Mackay</p> <p>Printed Name</p> |
| 1280' | 1310' | | | <p style="text-align: center;">¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p style="margin-top: 20px;">Certificate Number</p> |

1220 S. St. Francis Dr., Santa Fe, NM 87505

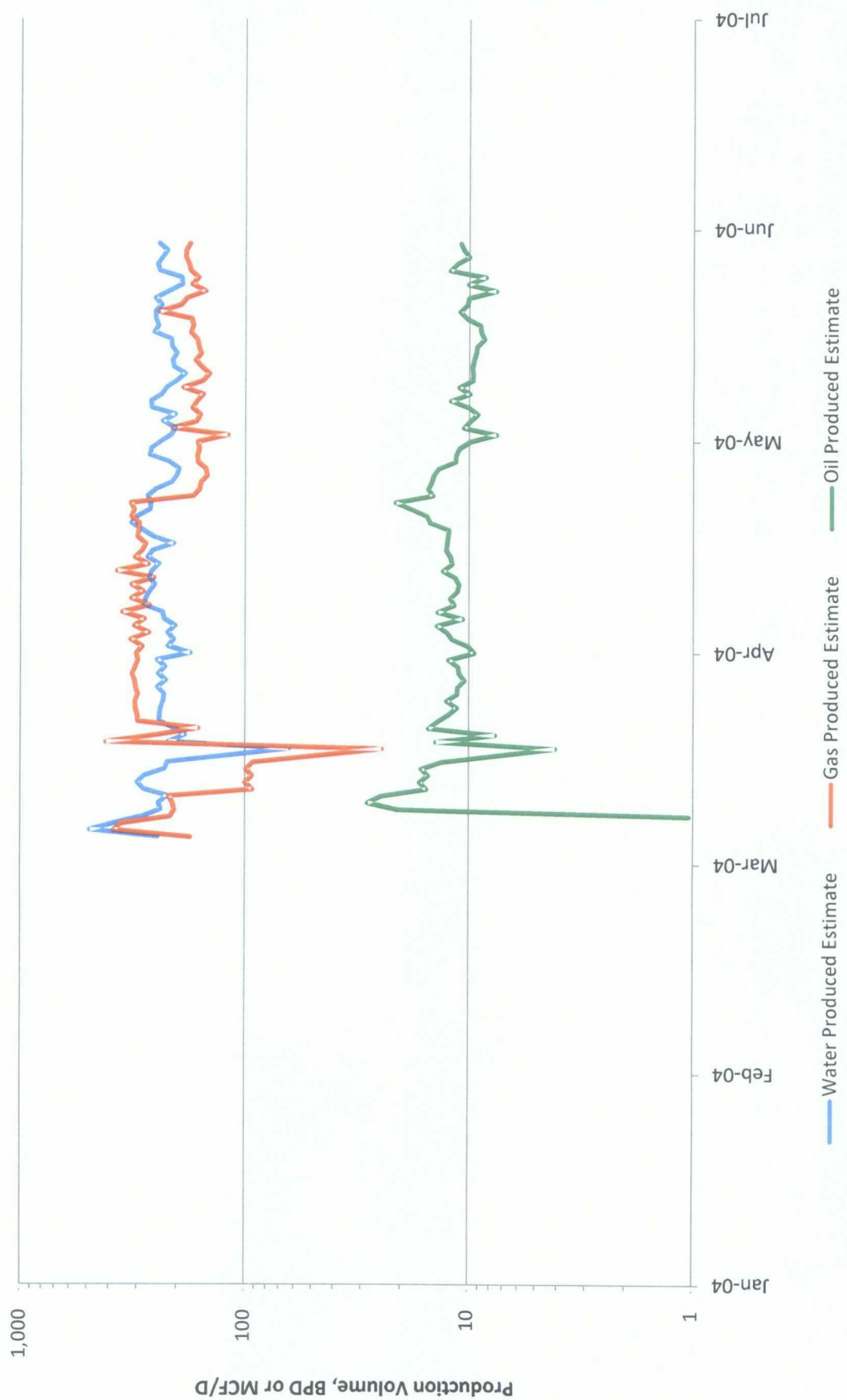
☐ AMENDED REPORT

| | | | | |
|-------|-------|--|--|---|
| 16 | | | | <p style="text-align: center;">17 OPERATOR CERTIFICATION</p> <p><i>I hereby certify that 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 unleased 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.</i></p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  Signature </div> <div style="text-align: center;"> 10/28/2009 Date </div> </div> <div style="border-top: 1px solid black; padding-top: 5px;"> Sophie Mackay Printed Name </div> |
| 1280' | | | | <p style="text-align: center;">18 SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <div style="border-top: 1px solid black; padding-top: 5px;"> Date of Survey Signature and Seal of Professional Surveyor: </div> <div style="border-top: 1px solid black; padding-top: 5px;"> Certificate Number </div> |
| | 1310' | | | |

Hawk B-1 #40 (Grayburg)



Hawk B-1 #40 (San Andres)



| Hawk B-1 #40 | | | | |
|---------------------|----------------------|------|-------|-------|
| Production | | BOPD | BWPD | MCF/D |
| Initial Production | Grayburg (6-24-04) | 43 | 291 | 116 |
| | San Andres (3-24-04) | 11 | 277 | 305 |
| Current Production | Grayburg | 5 | 20 | 60 |
| | San Andres | 0 | 0 | 0 |
| Expected Production | Grayburg | 5 | 20 | 60 |
| | San Andres | 5 | 150 | 60 |
| | Total Well | 10 | 170 | 120 |
| | | | | |
| Allocation | | Oil | Water | Gas |
| Current Allocation | Grayburg | 100% | 100% | 100% |
| | San Andres | 0% | 0% | 0% |
| Expected Allocation | Grayburg | 50% | 12% | 50% |
| | San Andres | 50% | 88% | 50% |

From: Origin ID: TULA (918) 491-4968
Amber Cooke

6120 S. Yale Ave
Suite 1500
Tulsa, OK 74136



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Ship Date: 28OCT09
ActWgt: 1.0 LB
CAD: 101193149/NET9090
Account#: S *****

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SHIP TO: (575) 234-5909

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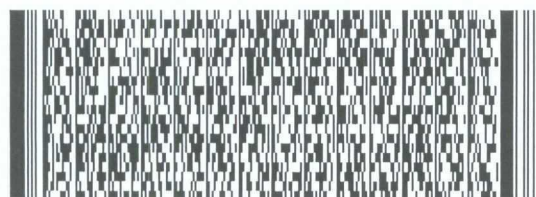
BLM Carlsbad
Bureau of Land Management Carlsbad
620 E GREENE ST

CARLSBAD, NM 88220

Ref #
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Dept #

TRK# 7960 7232 5923
0201

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