

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
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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.

Thomas P. Kacir  
 Print or Type Name

Thomas P. Kacir  
 Signature

Production Engineer 9-5-01  
 Title Date

TPKacir@MarathonOil.com  
 e-mail Address

SEP - 6 2001

For  
 Jicarilla Apache #11  
 Marathon Oil Co.  
 change DHC 2717

125330886

AMEND DHC 2717 N/R

Houston Division  
Production Operations, United States**Marathon  
Oil Company**

OIL CONSERVATION DIV.

01 SEP -6 AM 11:36  
P.O. Box 2490  
Hobbs, New Mexico 88240  
Telephone 505/393-7106

August 31, 2001

Mr. David Catanach  
Oil Conservation Department  
Energy and Minerals Department  
P.O. Box 6429  
Santa Fe, New Mexico 87505-6429

RE: **Jicarilla Apache Well No. 11**  
**Unit Letter M, 1040' FSL & 800' FWL**  
**Section 28, T-26-N, R-5-W**  
**Rio Arriba County, New Mexico**

**Request Change to DHC #2717**  
**Blanco Mesaverde (Prorated gas - 72319)**  
**Otero Chacra (Gas - 82329)**

**Request Change to MC #1759**  
**South Blanco Pictured Cliffs (Prorated gas - 72439)**  
**Blanco Mesaverde & Otero Chacra**

Dear Mr. Catanach:

Marathon Oil Company requests administrative approval to change the production allocation on the DHC #2717 permit in the above subject well in Rio Arriba County, New Mexico. The pools to be down-hole commingled are Otero Chacra and the Blanco Mesaverde. This well will continue to be a dual completion but with the South Blanco Pictured Cliffs (Prorate gas - 72439) produced separately from the Chacra, Mesaverde.

Jicarilla Apache Well No. 11 was drilled and completed as a dual Dakota and Pictured Cliffs producer in 1967 (MC-1759). In September 2000, the Dakota perforations were abandoned after an unsuccessful attempt to retrieve the packer. A 4-1/2" casing string was ran inside the 7-5/8" casing to isolate the Pictured Cliffs perforations. The Mesaverde and Chacra were then perforated, stimulated and tested. This well is now producing from the Pictured Cliffs up the casing casing annulus and the Chacra, Mesaverde up the tubing.

In April 2000, we received the DHC #2717 to Down-Hole Commingle the Dakota, Mesaverde, Chacra and Pictured Cliffs. After the work over we re-filed and received an amended order to Down-Hole Commingle the Mesaverde and Chacra, but Marathon did not allocate any oil production. A letter was sent by Marathon to allocate the oil production but had all four pools listed. We received approval for the oil allocation in March 2001 with all four pools showing up with gas allocations.

The down-hole commingle allocations are listed on the attachment. Enclosed is data supporting the change in pool production allocation for the down-hole commingling on Jicarilla Apache Well No. 11. If additional information is necessary or you have any questions, please contact me at (915) 687-8450.

Sincerely,

Thomas P. Kacir  
Production Engineer

Enclosure

**Jicarilla Apache Well No. 11**  
**Jicarilla Field**

**A: Operator**

Marathon Oil Company  
P.O. Box 2490  
Hobbs, New Mexico 88241

**B: Lease Name and Well Number**

Jicarilla Apache Well No. 11  
Unit Letter M, 1040' FSL & 800' FWL  
Section 28, T-26-N, R-5-W  
Rio Arriba County, New Mexico  
Mesaverde, Chacra Pools

**C: C-116's**

Attached

**D: Production Decline Curves**

Decline Curve is Attached

**E: Production Allocation**

<u>POOL</u>	<u>BOPD</u>	<u>MCFD</u>	<u>BWPD</u>	<u>Estimated Methods</u>
Chacra	0	565	24	Workover Test
Chacra	0	261	0	Post-Workover Model with high casing pressure (only modeled gas)

<u>POOL</u>	<u>BOPD</u>	<u>MCFD</u>	<u>BWPD</u>	<u>Estimated Methods</u>
Chacra & Mesaverde	18	595	30	Post Workover test
Chacra	0	261	11	Post Workover Model
Mesaverde	18	334	19	(estimated water)

<u>Allocated Percentages</u>	<u>Oil %</u>	<u>Gas %</u>	<u>Water %</u>
Chacra	0	56	37
Mesaverde	100	44	63
Total	100	100	100

District I  
1525 N. French Drive, Hobbs, NM 88240

District II  
1301 W. Grand Avenue, Artesia, NM 88210

District III  
1000 Rio Brazos 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 May 15, 2000

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

Marathon Oil Company P.O. Box 2490 Hobbs, NM 88241  
Operator Address

Jicarilla Apache 11 UL 'M', Sec 28, T-26-N, R-5-W Rio Arriba  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 14021 Property Code 6414 API No. 30-039-08149 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Otero Chacra	NA	Blanco Mesaverde
Pool Code	82329	NA	72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3714' - 3739'	NA	4808' - 5126'
Method of Production (Flowing or Artificial Lift)	Artificial Lift (Plunger lift)	NA	Artificial Lift (Plunger 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	NA
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1120	NA	1225
Producing, Shut-In or New Zone	Producing	NA	Producing
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: 8-27-01 Rates: 0.4/203/0.2 Commingled with Mesaverde	Date: NA Rates: NA	Date: 8-27-01 Rates: 0.4/203/0.2 Commingled with Mesaverde
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 0 % 56 %	Oil Gas % %	Oil Gas 100 % 44 %

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 Thomas P. Kacir TITLE Production Engineer DATE 9/24/01

TYPE OR PRINT NAME Thomas P. Kacir TELEPHONE NO. ( 915 ) 687-8450

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-116  
Revised March 17, 1999

Submit 2 copies  
To Appropriate  
District Office

## GAS - OIL RATIO TEST

Operator		Pool		County											
Marathon Oil Company		Chacara		Rio Arriba											
Address		TYPE OF TEST - (X)		Completion <input checked="" type="checkbox"/> X		Special <input type="checkbox"/>									
PO Box 2490 Hobbs, NM 88240															
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU FT/BBL.
		U	S	T							R	WATER BBL.S.	GRAV. OIL	OIL BBL.S.	
Jicarilla Apache API 30-039-08149	11	M	28	26	5	9/13/01	F		135		8	24	0	565	N/A

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

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

Signature Kelly Cook

Kelly Cook Admin. Assistant  
Printed Name and Title

August 31, 2001 393-7106  
Date Telephone No.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-116  
Revised March 17, 1999

Submit 2 copies  
To Appropriate  
District Office

GAS - OIL RATIO TEST

Operator		Pool		County												
Marathon Oil Company		Chacara and Mesa Verde		Rio Arriba												
Address		TYPE OF TEST - (X)		Completion <input checked="" type="checkbox"/> X		Special <input type="checkbox"/>										
PO Box 2490 Hobbs, NM 88240																
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU FT/BBL.
		U	S	T	R							WATER BBL.S.	GRAV. OIL	OIL BBL.S.	GAS M.C.F.	
Jicarilla Apache API 30-039-08149	11	M	28	26	5	9/26/00	*	CP 281	195		24	30	18	595	33,056	
						12/13/00	*	181	110		24	0	6	304	50,667	
						7/12/01	*	93	40		24	0	0	242	N/A	
FOR INFORMATION ONLY																
* = Plunger Lift																

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

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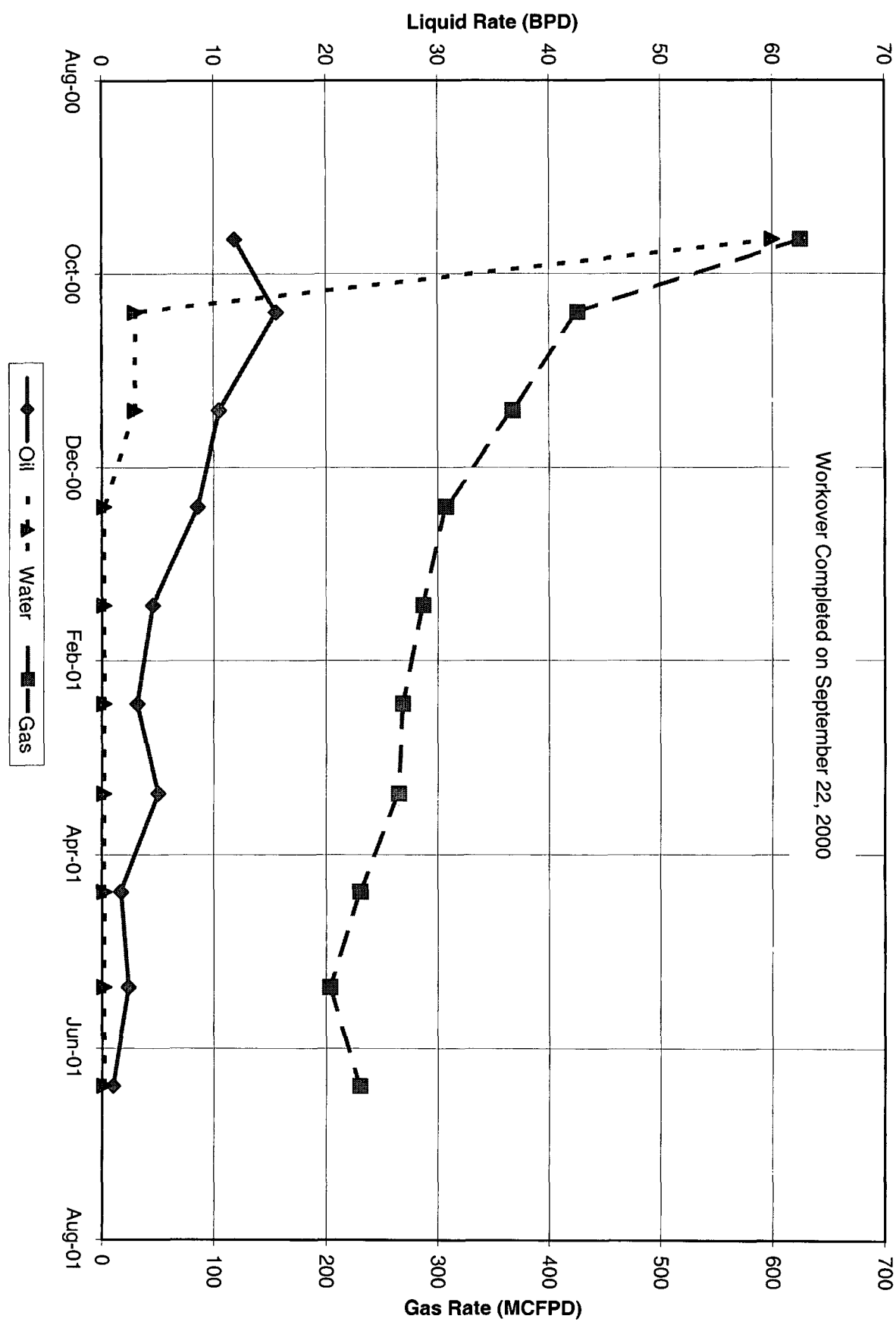
I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Signature Kelly Cook

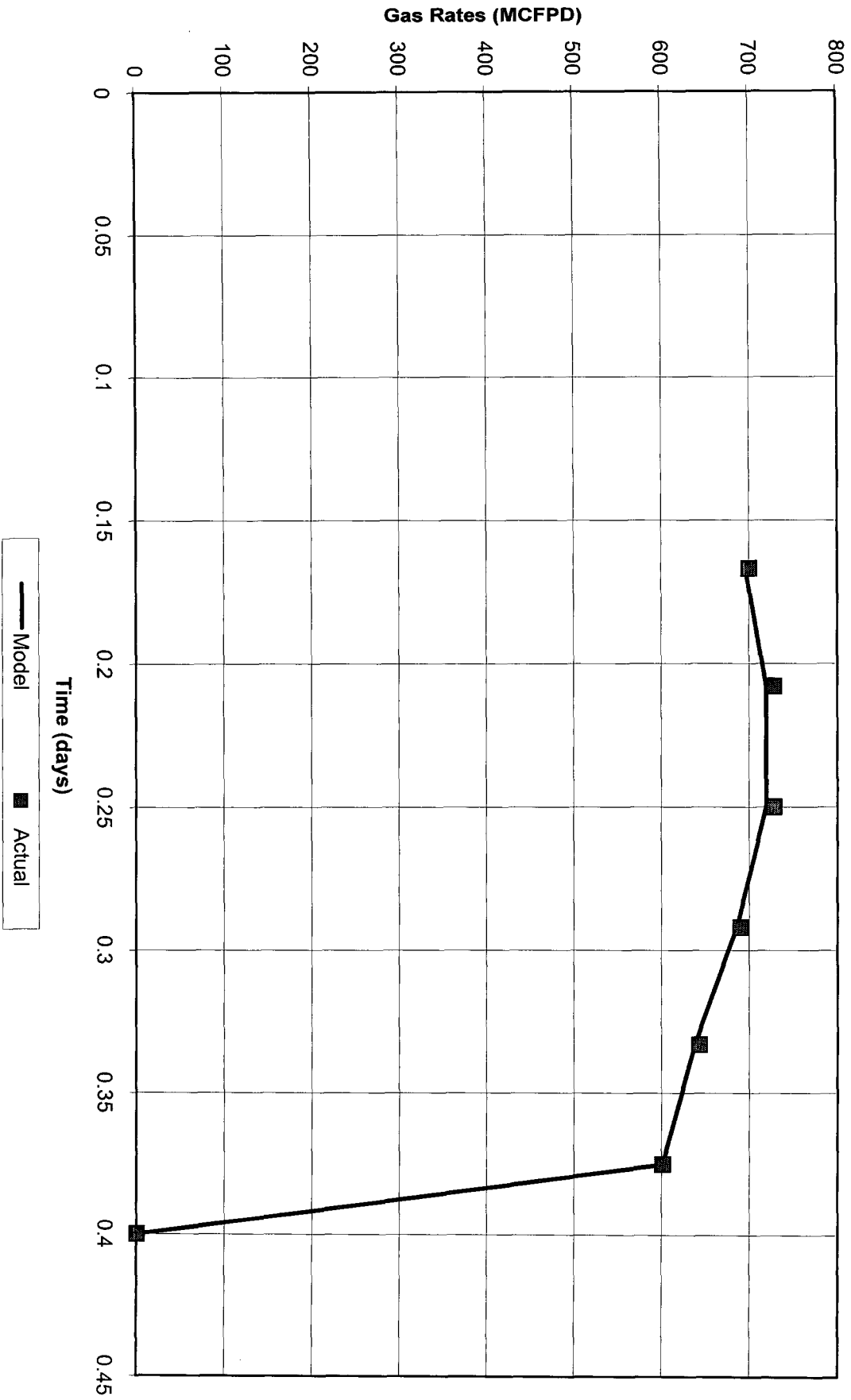
Kelly Cook Admin. Assistant  
Printed Name and Title

August 31, 2001 393-7106  
Date Telephone No.

# Jicarilla Apache Well No 11 Chacra & Mesaverde

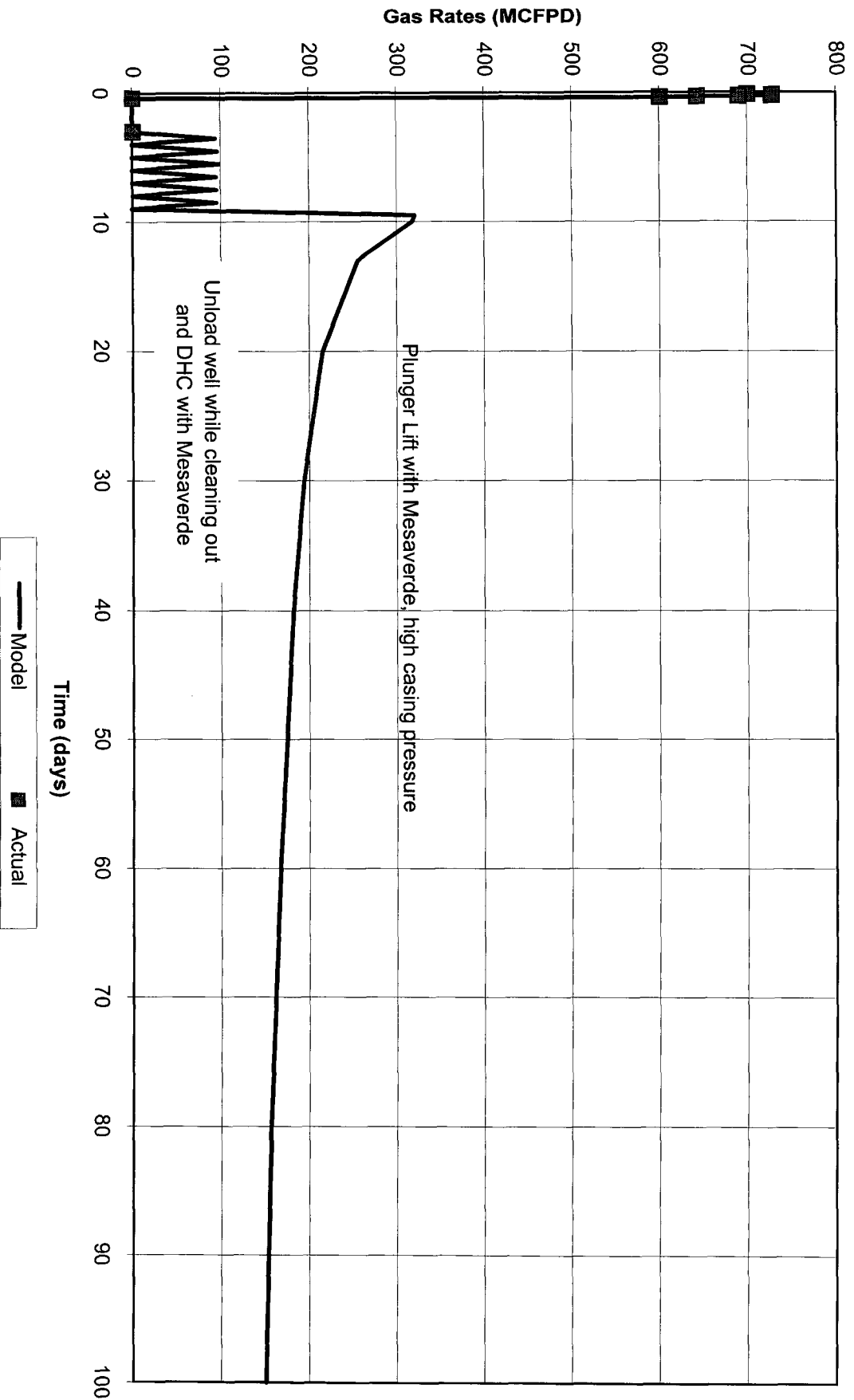


Jicarilla Apache #11  
Chacra Model





# Jicarilla Apache #11 Chacra Model





**MARATHON OIL COMPANY**  
**MID-CONTINENT REGION**  
**MIDLAND OPERATIONS NORTHWEST NEW MEXICO**

DATE: 08/24/99

AFTER WORKOVER

BY: TL CHASE  
Rev 8-4-00 MDB

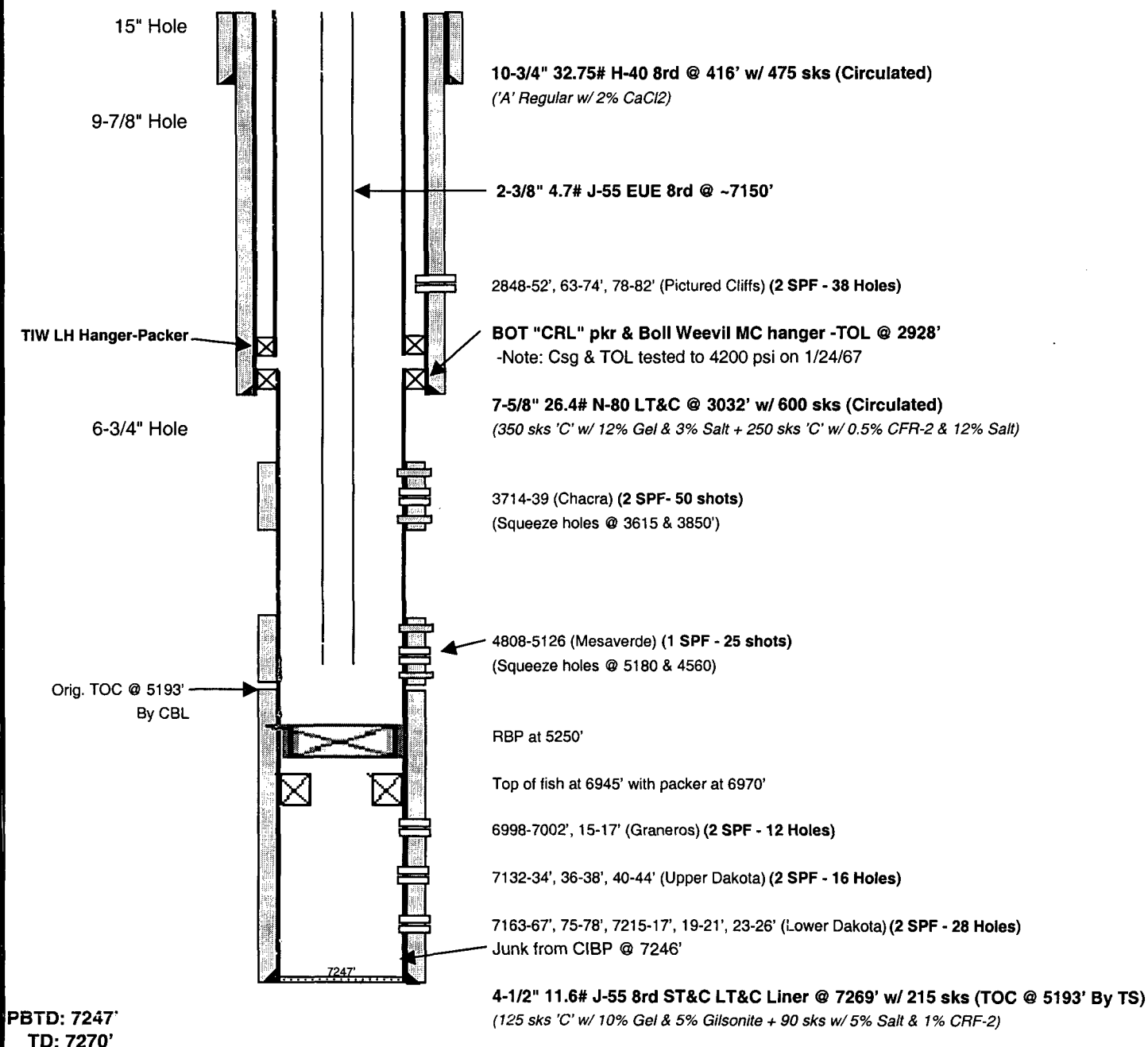
FIELD: JICARILLA  
LEASE: JICARILLA APACHE  
COUNTY: RIO ARRIBA

WELL: 11  
STATE: New Mexico

API: 30-039-08149  
SPUD DATE: 01/09/67  
LOCATION: 1040' FSL & 800' FWL, SEC 28, T26N, R 5W, U L "M"

REACHED TD: 01/19/67  
COMPLETED: 02/01/67

GL = 6465'  
KB = 6478'



**Well History**

Jan '67

Perf'd Lower Dakota (2 SPF) @ 7163-67', 75-78', 7215-17', 19-21', 23-26'. Acidized w/ 500 gal 15% MCA & 1500 gal 7-1/2% HCl acid. Frac'd w/ 20,000 gal 1% KCl water w/ 60,000# 20-40 sand. Perf'd Graneros (2 SPF) @ 6998-7002', 7015-17' & Upper Dakota (2 SPF) @ 7132-34', 36-38', 40-44'. Acidized Graneros/Upper Dakota 6998-7144' w/ 1000 gal MCA. Frac'd w/ 20,580 gal 1% KCl water w/ 50,000# 20-40 sand. Perf'd Pictured Cliffs (2 SPF) @ 2848-52', 63-74', 78-82'. Frac'd w/ 12,180 gal 1% KCl water w/ 50,000# 10-20 sand.