

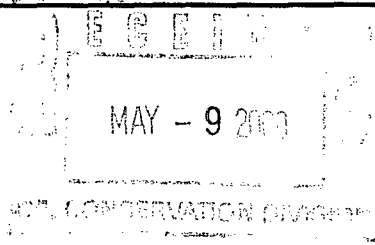
Mallon Oil Company

♦ Denver & Durango, Colorado ♦
♦ Carlsbad, New Mexico ♦

a Mallon Resources subsidiary

DHC 5/30/00

Mr. David Catanach
State of New Mexico
Oil Conservation Division
2040 S Pacheco
Santa Fe, NM 87505



May 5, 2000

RE: Application for Administrative Approval of Downhole Commingling
Jicarilla 460-16 No. 6
Sec. 16, T30N R3W
Rio Arriba County, New Mexico

2748

Dear Mr. Catanach:

Mallon Oil Company (Mallon) operates the above-referenced well, the Jicarilla 460-16 No. 6. The well currently produces from the Ojo Alamo zone and the San Jose zones, which are completed separately. It is not economical to continue to operate both zones separately, and Mallon believes the zones should be produced at this time to prevent any further potential depletion. The pressure expected in the San Jose formation is approximately 260 psi or less. The initial Ojo Alamo reservoir pressure is in the range of 1,100 psi as detailed in the in the attachment; after drawdown has occurred, it is expected that the Ojo Alamo reservoir pressure will drop to pressures similar to the San Jose formation pressure.

Mallon respectfully requests administrative approval for down-hole commingling of the Ojo Alamo and the San Jose formations in the well. The commingling is necessary to permit all zones to be effectively produced in this well. There will not be crossflow between zones. It is intended that by commingling zones the bottom hole pressure will be reduced below that of the San Jose and that the combined gas flow and open-ended tubing configuration will allow for better lifting of produced water and ultimately improved daily production. Additionally, this configuration will allow for use of a plunger lift to more consistently lift produced water from the well bore. The flowing well bottom-hole pressure will be less than the zones' reservoir pressures.

The ownership from all current producing and proposed zones is common. The enclosed attachments detail the information required by rule 303C for administrative approval of downhole commingling.

Please do not hesitate to contact me if you have any questions about this matter.

Sincerely,
MALLON OIL COMPANY

Ray E. Jones
Vice President, Engineering

Attachments

cc: Bureau of Land Management (BLM) - Albuquerque
Banko Petroleum Management, Inc.

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First St., Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410
DISTRICT IV
2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

Form C-107-A
Revised August 1999

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Mallon Oil Company

999 18th Street, Suite 1700, Denver, CO 80202

Operator

Address

Jicarilla 460-16

No. 6

Unit B (NW/4 NE/4) Sec. 16 T30N R3W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 013925 Property Code 22183 API NO. 30-039-25865 Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Cabresto Canyon San Jose Ext. 96822		Cabresto Canyon Ojo Alamo Ext. 96538
2. Top and Bottom of Pay Section (Perforations)	1,646' – 1,709'		3,276' – 3,322'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) b. (Original)	a. b.	a. 340 psi b.
6. Oil Gravity (EAPI) or Gas BTU Content	1,084.2 BTU Dry @ 15.025 psia		1,114.9 BTU Dry @ 15.025 psia
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		Yes
* If Shut-In, give 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 * If Producing, give date and oil/gas/ water rates of recent test (within 60 days)	Date: N/A Rates:	Date: Rates:	Date: N/A Rates:
	Date: February 2000 Rates: 317.6 mcf/d gas 0.086 mb water	Date: Rates:	Date: February 2000 Rates: 72.8 mcf/d gas 16.488 mb water
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: 81.0 %	Oil: % Gas: %	Oil: % Gas: 19.0 %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☐ Yes ☐ No

11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☐ Yes ☐ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No

13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). NSL 2831-A

16. 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, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

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

SIGNATURE Ray E. Jones TITLE V.P Engineering DATE May 5, 2000

TYPE OR PRINT NAME Ray E. Jones TELEPHONE NO. (303) 293-2333, ext 1450

Mallon Oil Company

a Mallon Resources subsidiary

♦ Denver & Durango, Colorado ♦
♦ Carlsbad, New Mexico ♦

Mr. Brian Davis
Bureau of Land Management
Albuquerque Field Office
435 Montañó Road NE
Albuquerque, NM 87107-4935

May 5, 2000

RE: Application for Administrative Approval of Downhole Commingling
Jicarilla 460-16 No. 6
Sec. 16, T30N R3W
Rio Arriba County, New Mexico

Dear Mr. Davis:

Enclosed please find a commingling application for the above-referenced well. The original was sent to the State of New Mexico Oil Conservation Division. Also, enclosed is a completed Sundry Notice, form 3160-5, for your use.

Please do not hesitate to contact me if you have any questions about this matter.

Sincerely,

MALLON OIL COMPANY



Ray E. Jones
Vice President, Engineering

Attachments

cc: Banko Petroleum Management, Inc.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill, or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE

1. TYPE OF WELL

Oil Well ☐ Gas Well ☒ Other: _____

2. NAME OF OPERATOR

Mallon Oil Company

3. ADDRESS AND TELEPHONE NO.

999 18th Street, Suite 1700
Denver, CO 80202CONTACT: Ray E. Jones
PHONE: 303-293-2333

4. LOCATION OF WELL (Footage, T, R, M, or Survey Description)

1,190' FNL 1,748' FEL Sec. 16 T 30N R 3W
Unit B (NW/4 NE/4)

5. LEASE SERIAL NO.

Jicarilla 460

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Jicarilla Apache

7. IF UNIT OR CA, AGREEMENT DESIGNATION

N/A

8. WELL NAME AND NO.

Jicarilla 460-16 No. 6

9. API WELL NO.

30-039-25865

10. FIELD AND POOL, OR EXPLORATORY AREA

E. Blanco

11. COUNTY OR PARISH, STATE

Rio Arriba NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (start/resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Commingle</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with the BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Mallon Oil Company intends to commingle the Ojo Alamo zone and the San Jose zone. An application has been made (see attached) to the State of New Mexico Oil Conservation Division for approval to down hole mingle the Ojo Alamo and the San Jose zones.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Ray E. Jones

Title: Vice President - Engineering

Signature

Date: May 5, 2000

THIS SPACE FOR FEDERAL OR STATE OFFICE USE.

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

**Application for Downhole Commingling
Under NMOCD Rule 303C
For Gas Wells**

Jicarilla 460-16 No. 6

- a) By operator:
Mallon Oil Company
999 18th Street, Suite 1700
Denver, CO 80202
- b) In the well:
Jicarilla 460-16 No. 6
Well location: Unit B (NW/4 NE/4) Sec. 16 T30N R3W
Rio Arriba County, New Mexico
Lease description: NE/4 Sec. 16 T30N R3W
(See attached "Well Location and Acreage Dedication Plat")
- For the pools:
Cabresto Canyon – Ojo Alamo Ext
Cabresto Canyon – San Jose Ext
- c) A plat of the area surrounding the Jicarilla 460-16 No. 6 well showing the ownership of direct and diagonal offset locations is included.
- d) The Ojo Alamo and the San Jose zones in this well produce dry gas; therefore, no state form C116 is required or available for the current completion.
- e) A production decline curve is included that shows the Ojo Alamo zone production. The San Jose has also been completed in this well, but is completed separately from the Ojo Alamo. A production decline curve is also included that shows the San Jose zone production.
- f) The San Jose bottom hole pressure was measured on May 21, 1999 after a one-day shut in and was 142 psi at 1,534'. The gradient is primarily filled with gas, as a static gas gradient was established very early in the test. Flowing bottomhole pressure for the Ojo Alamo was measured at 341 psi at 3,135'. It is intended that by commingling zones the bottom hole pressure will be reduced below that of the San Jose and that the combined gas flow and open-ended tubing configuration will allow for better lifting of produced water and ultimately improved daily production. Additionally, this configuration will allow for use of a plunger lift to more consistently lift produced water from the well bore.
- g) There will be no loss in total gas quality or value due to mixing of the production streams.
- The Ojo Alamo and the San Jose zones produce gas with no condensate. A copy of a gas analysis from each of these zones is included. The gas from the Ojo Alamo is 92.02 % methane; from the San Jose, 94.56% methane.
- h) Because of reduced operation costs per zone, commingling of the zones would allow each individual zone to be produced to a lower economic rate and would increase ultimate recovery from both zones.

- i) No commingling presently occurs in the well.

The San Jose was flow tested during completion and has been measured during 1999. This rate and the well rate for 1999 from the Ojo Alamo will be used to determine an allocation factor. The allocation factor for the San Jose formation is 0.81.

- j) A reference map for the Jicarilla 460-16 No. 6 well and surrounding wells has been included. A circle with a radius of approximately one mile has been drawn around this well for reference only. The direct and diagonal offset wells:

Well Name	Location	Operator
Jicarilla 460-16 1	SW/4 NW/4 Sec. 16 T30N R3W	Mallon Oil Company
Jicarilla 460-16 SJ 1	SW/4 NW/4 Sec. 16 T30N R3W	Mallon Oil Company
Jicarilla 460-16 4	SW/4 SW/4 Sec. 16 T30N R3W	Mallon Oil Company
Jicarilla 460-16 SJ 4	SW/4 SW/4 Sec. 16 T30N R3W	Mallon Oil Company
Jicarilla 460-16 5	SW/4 SE/4 Sec. 16 T30N R3W	Mallon Oil Company
Jicarilla 458-8 10	SE/4 SE/4 Sec. 8 T30N R3W	Mallon Oil Company
Jicarilla 458-8 10	SE/4 SE/4 Sec. 8 T30N R3W	Mallon Oil Company
Jicarilla 457-10 8	SW/4 SW/4 Sec. 10 T30N R3W	Mallon Oil Company
Jicarilla 457 1	SW/4 SW/4 Sec. 9 T30N R3W	Mallon Oil Company
Jicarilla 457 SJ 1	SW/4 SW/4 Sec. 9 T30N R3W	Mallon Oil Company
Jicarilla 457-9 1	SE/4 SE/4 Sec. 9 T30N R3W	Mallon Oil Company
Jicarilla 457-9 3	NE/4 NE/4 Sec. 9 T30N R3W	Mallon Oil Company

The ownership of the two producing zones for the Jicarilla 460-16 No. 6 well is common so notification of this application is not necessary. The following is a list of the working, royalty, and overriding royalty interest owners for this well for both formations.

Jicarilla Apache Contract 459
MMS Aid #609-000459-0-000
Bureau of Indian Affairs
PO Box 507
Dulce, NM 87528

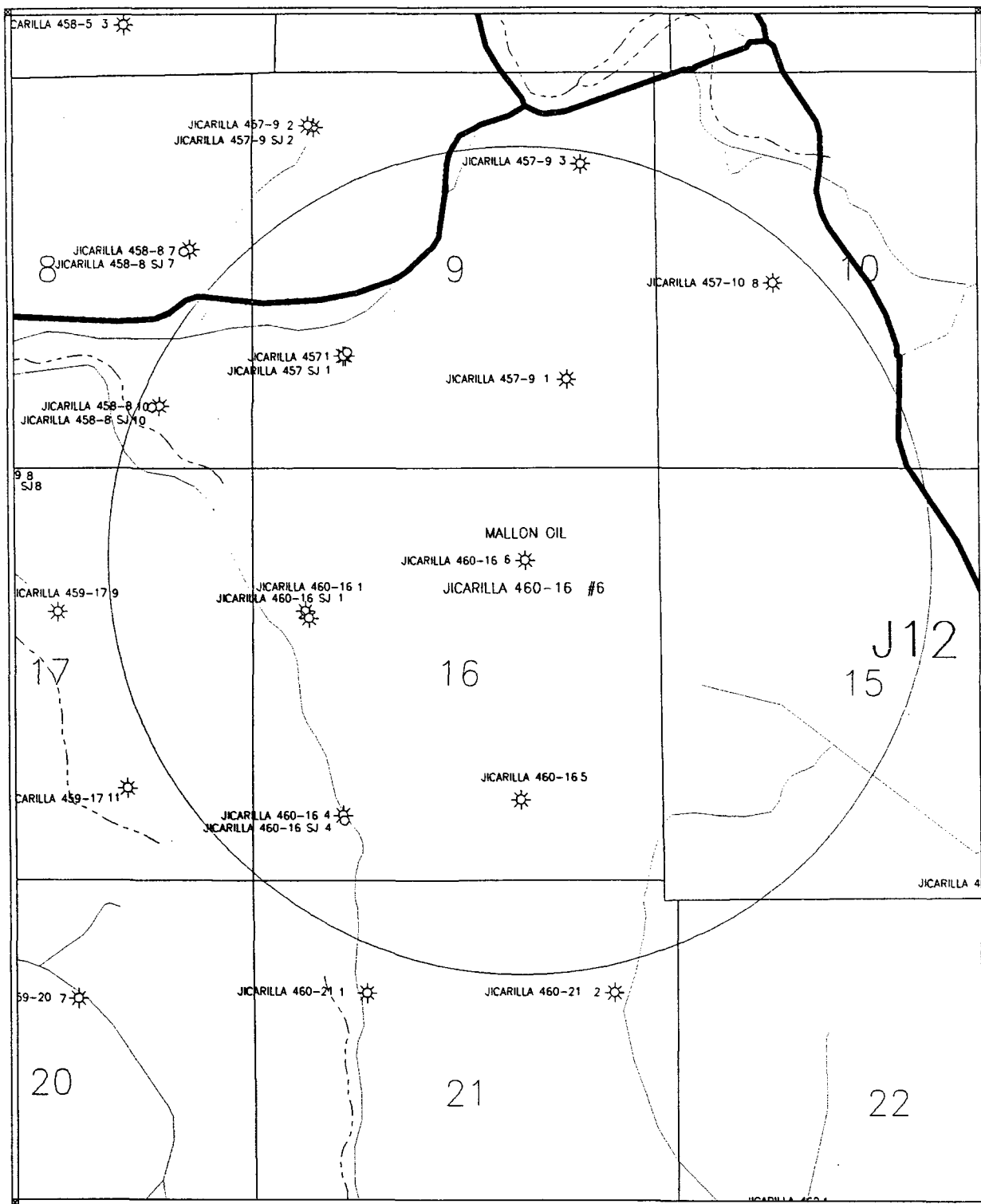
Bayless Grandchildren's Trust
c/o Tommy Roberts, Trustee
PO Box 129
Farmington, NM 87499

Jaco Production Company
PO Box 1807
Bakersfield, CA 93303

Ken Kamon
PO Box 10589
Midland, TX 79702

Kevin Fitzgerald
c/o Mallon Oil Company
999 18th Street, Suite 1700
Denver, CO 80202

Mallon Oil Company
999 18th Street, Suite 1700
Denver, CO 80202



Scale 1:24000.

0.1 0. 0.1 0.2 0.3 0.4 0.5 miles

MALLON OIL COMPANY

One Mile Radius Map
Jicarilla 460-16 #6
Rio Arriba County, New Mexico

46016_6M.GPF

J. Moore

03/30/2000

DISTRICT II

Drawer DD, Artesia, N.M. 88211-0719

Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III

1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV

PO Box 2088, Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-25865		Pool Code	Pool Name Cabresto Canyon; Ojo Alamo Ext.
Property Code 22183	Property Name Jicarilla 460-16		Well Number #6
GRID No. 013925	Operator Name Mallon Oil Co.		Elevation 7291'

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
	16	30 N	3 W		1190'	North	1748	East	Rio Arriba

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	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
1917 B.C. OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

10	S89-56-43E	5284.9'	1917 B.C.	1190'	1748'	2638.8'	N00-02-51W	1917 B.C.	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <u>Christy Serrano</u> Signature Christy Serrano Printed Name Production Secretary Title 4/20/98 Date
									¹⁸ 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. 3-2 Date of Survey Signature and Seal of Professional Surveyor 8894 8894 Certificate Number

RECEIVED
AUG 11 1998
OIL CON. DIV.
DIST. 3

Exhibit A

ACT II
Drawer DD, Artesia, N.M. 88211-0719DISTRICT III
000 Rio Brazos Rd., Aztec, N.M. 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088☐ AMENDED REPORTDISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-25865		Pool Code	Pool Name Cabresto Canyon; San Jose Ext.
Property Code 22183	Property Name Jicarilla 460-16		Well Number #6
OGRID No. 013925	Operator Name Mallon Oil Co.		Elevation 7291'

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
	16	30 N	3 W		1190'	North	1748	East	Arriba

¹¹ Bottom Hole Location If Different From Surface

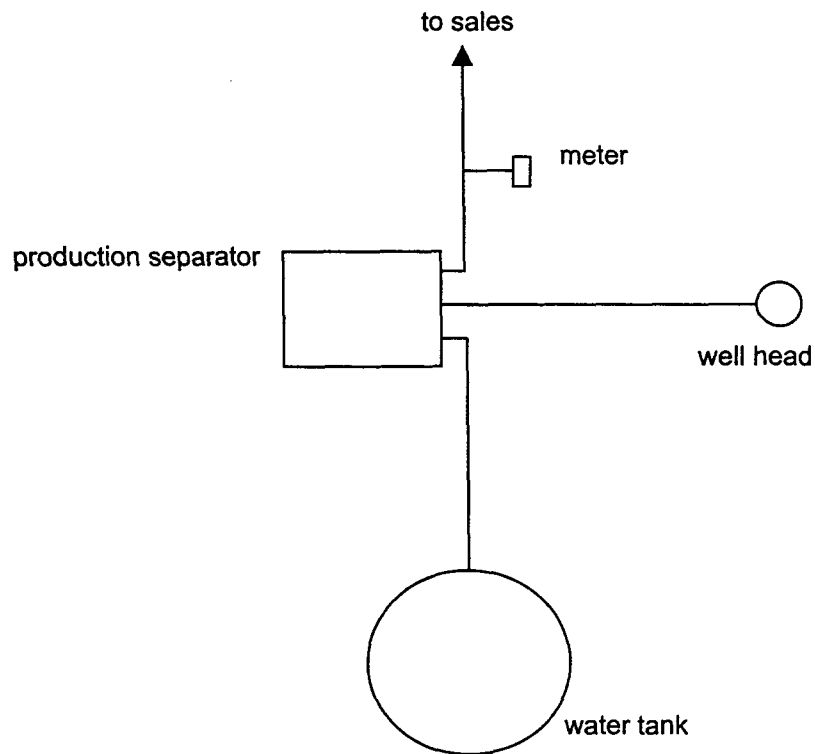
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
1917 B.C. OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

14	S89-56-43E	5284.9'	1190'	1748'	1917 B.C.	1917 B.C.	1748'	2638.8'	N00-02-51W	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <u>Christy Serrano</u> Signature Christy Serrano Printed Name Production Secretary Title 4/20/98 Date
<div style="text-align: center;"> RECEIVED AUG 1 1998 OIL CON. DIV. DIST. 3 </div>										

Exhibit A



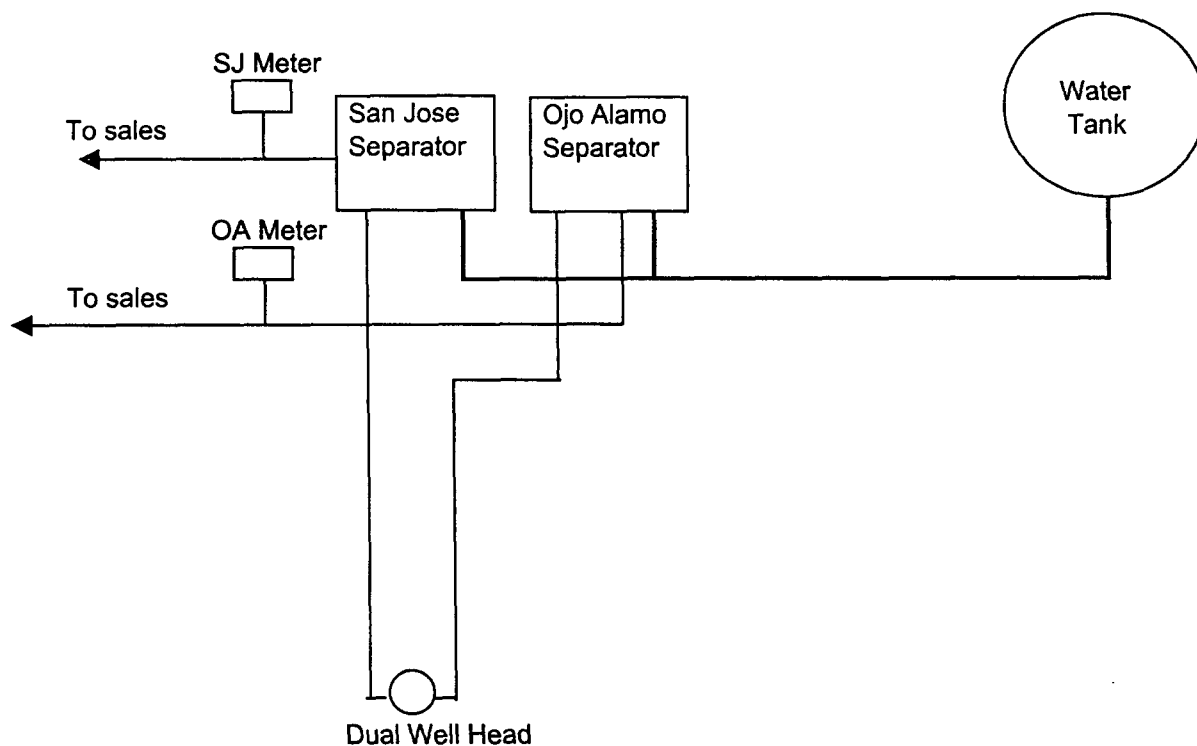
Site Facility Diagram Available At:

Mallon Oil & Gas Company
848 East 2nd Avenue
P.O. Box 2797
Durango, CO 81302

Telephone: 970-382-9100

Site Facility Diagram:

Company: Mallon Oil
Lease: Jicarilla
Well Name: 460-16 no. 6
Location: Sec 16, T30N R3W
County/State: Rio Arriba, NM



Dual Completion

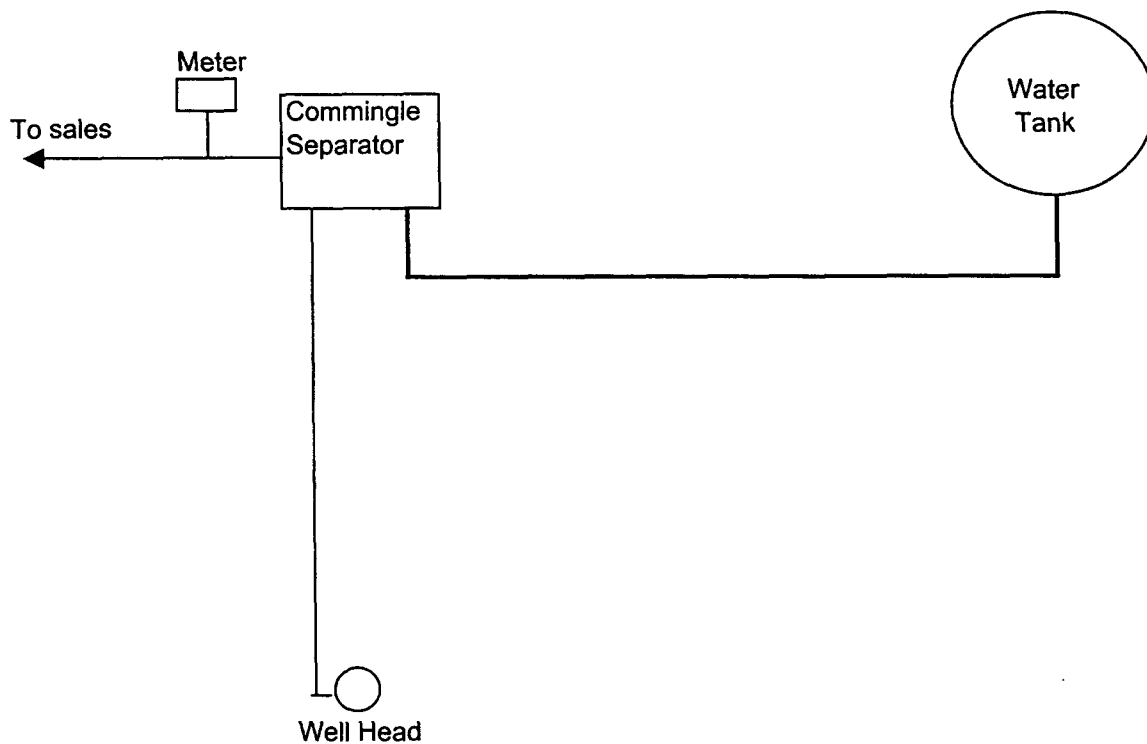
Site Facility Diagram Available At:

Mallon Oil & Gas Company
848 East 2nd Avenue
P.O. Box 2797
Durango, CO 81302

Telephone: 970-382-9100

Site Facility Diagram:

Company: Mallon Oil
Lease: Jicarilla
Well Name: 460-16 no. 6
Location: Sec 16, T30N R3W
County/State: Rio Arriba, NM



Commingled Completion

Site Facility Diagram Available At:

Mallon Oil & Gas Company
848 East 2nd Avenue
P.O. Box 2797
Durango, CO 81302

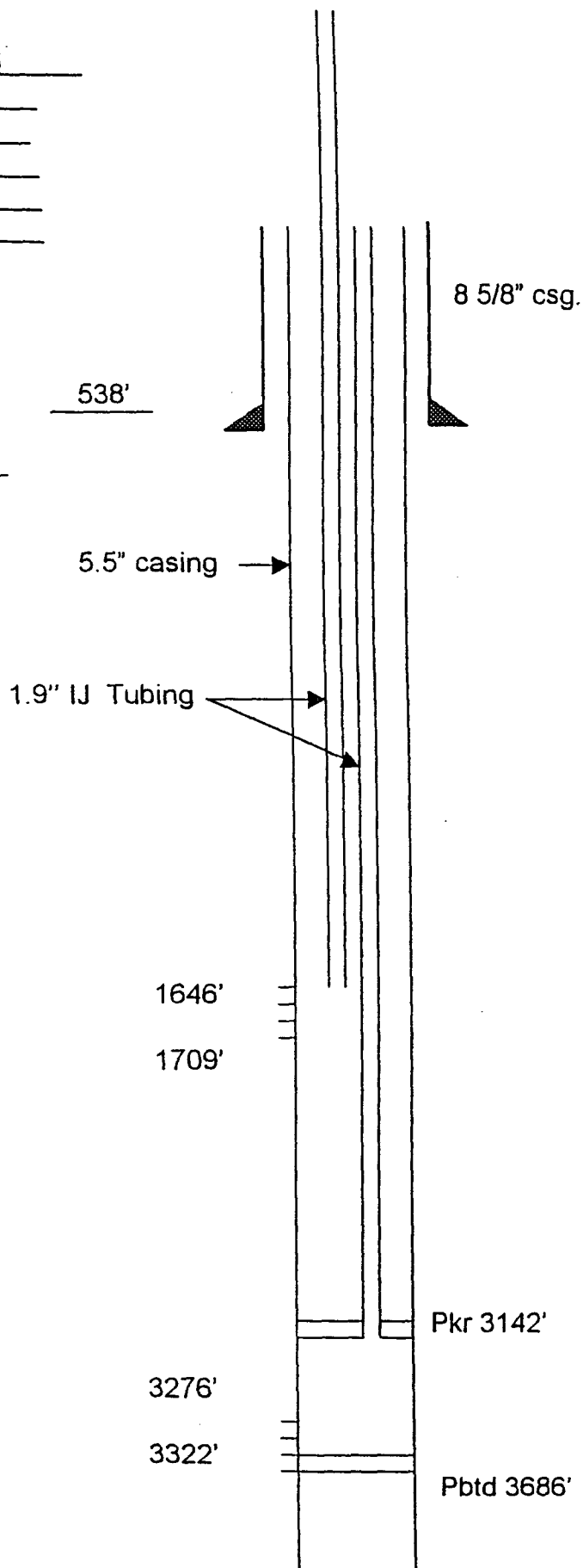
Telephone: 970-382-9100

Site Facility Diagram:

Company: Mallon Oil
Lease: Jicarilla
Well Name: 460-16 no. 6
Location: Sec 16, T30N R3W
County/State: Rio Arriba, NM

WELL NAME: JICARILLA 460-16 No. 6
FIELD: EAST BLANCO
LEGAL: SEC 16 TN 30 RW 03
PRODUCING INTERVAL: 1646'-1709'
3276'-3322'

NOTES: San Jose perfs 1646'-1709'
Ojo Alamo perfs 3276'-3322'



JIC 460-16 #06 (OA)
 RIO ARriba CO., NM - B 16 T30N R03W
 BLANCO EAST (OJO ALAMO)
 MALLON OIL COMPANY
 OJO ALAMO
 1PDP

DATE: 05/03/**
 TIME: 08:44:13
 FILE: 2000
 GET : 375
 STID: 1Q2000
 .CMD: JUNK
 .OUT: JIC_PROD

PRODUCTION DATA

THROUGH 2/28/2000

PERIOD ENDING	DAYS PROD	OIL, MB	OIL BBL/D	GAS, MMF	GAS MCF/D	YIELD BBL/MMF	WATER, MB	WATER PCT	CUM. OIL, MB	CUM. GAS, MMF	CUM. WATER, MB	FTP, PSI
PRIOR												
1/98		0.000		0.000		0.000	0.000	0.0	0.000	0.000	0.000	
1/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
2/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
3/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
4/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
5/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
6/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
7/98	8	0.000	0.0	1.090	136.2	0.000	0.293	100.0	0.000	1.090	0.293	0
8/98	24	0.000	0.0	5.238	218.3	0.000	1.362	100.0	0.000	6.328	1.655	0
9/98	30	0.000	0.0	5.267	175.6	0.000	1.302	100.0	0.000	11.596	2.957	0
10/98	26	0.000	0.0	4.449	171.1	0.000	1.975	100.0	0.000	16.044	4.932	0
11/98	30	0.000	0.0	4.545	151.5	0.000	2.125	100.0	0.000	20.589	7.057	0
12/98	31	0.000	0.0	4.447	143.4	0.000	0.471	100.0	0.000	25.036	7.528	0
YR 98	149	0.000	0.0	25.036	168.0	0.000	7.528	100.0	0.000	25.036	7.528	
1/99	31	0.000	0.0	4.783	154.3	0.000	0.102	100.0	0.000	29.819	7.630	0
2/99	26	0.000	0.0	3.515	135.2	0.000	0.088	100.0	0.000	33.334	7.717	0
3/99	31	0.000	0.0	3.571	115.2	0.000	0.225	100.0	0.000	36.905	7.942	0
4/99	30	0.000	0.0	2.859	95.3	0.000	1.340	100.0	0.000	39.764	9.282	0
5/99	31	0.000	0.0	1.295	41.8	0.000	1.749	100.0	0.000	41.059	11.032	0
6/99	30	0.000	0.0	2.258	75.3	0.000	1.691	100.0	0.000	43.318	12.723	0
7/99	31	0.000	0.0	2.146	69.2	0.000	1.736	100.0	0.000	45.464	14.459	0
8/99	31	0.000	0.0	1.871	60.4	0.000	1.736	100.0	0.000	47.335	16.195	0
9/99	30	0.000	0.0	1.684	56.1	0.000	1.548	100.0	0.000	49.019	17.743	0
10/99	31	0.000	0.0	1.640	52.9	0.000	0.862	100.0	0.000	50.659	18.605	0
11/99	30	0.000	0.0	1.442	48.1	0.000	1.434	100.0	0.000	52.101	20.039	0
12/99	31	0.000	0.0	1.310	42.2	0.000	1.354	100.0	0.000	53.411	21.393	0
1/00	31	0.000	0.0	1.275	41.1	0.000	1.354	100.0	0.000	54.686	22.747	0
2/00	29	0.000	0.0	1.142	39.4	0.000	1.269	100.0	0.000	55.828	24.016	0
YR 00	423	0.000	0.0	30.792	72.8	0.000	16.488	100.0	0.000	55.828	24.016	
SUB												
TOTAL	572	0.000	0.0	55.828	97.6	0.000	24.016	100.0	0.000	55.828	24.016	
TOTAL		0.000		55.828		0.000	24.016	100.0	0.000	55.828	24.016	

JIC 460-16 #06 (SJ)
 RIO ARRIBA CO., NM - B 16 T30N R03W
 BLANCO EAST (SAN JOSE)
 MALLON OIL COMPANY
 SAN JOSE
 1PDP

DATE: 05/03/**
 TIME: 08:44:13
 FILE: 2000
 GET : 434
 STID: 1Q2000
 .CMD: JUNK
 .OUT: JIC_PROD

P R O D U C T I O N D A T A

THROUGH 2/28/2000

PERIOD ENDING	DAYS PROD	OIL, MB	OIL BBL/D	GAS, MMF	GAS MCF/D	YIELD BBL/MMF	WATER,MB	WATER PCT	CUM. OIL, MB	CUM. GAS, MMF	CUM. WATER,MB	FTP,PSI
PRIOR												
1/98		0.000		0.000		0.000	0.000	0.0	0.000	0.000	0.000	
1/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
2/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
3/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
4/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
5/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
6/98	0	0.000	0.0	0.000	0.0	0.000	0.000	0.0	0.000	0.000	0.000	0
7/98	4	0.000	0.0	2.042	510.6	0.000	0.000	0.0	0.000	2.042	0.000	0
8/98	23	0.000	0.0	14.271	620.5	0.000	0.000	0.0	0.000	16.313	0.000	0
9/98	30	0.000	0.0	19.682	656.1	0.000	0.001	100.0	0.000	35.995	0.001	0
10/98	26	0.000	0.0	17.149	659.6	0.000	0.003	100.0	0.000	53.144	0.004	0
11/98	30	0.000	0.0	18.603	620.1	0.000	0.000	0.0	0.000	71.747	0.004	0
12/98	31	0.000	0.0	16.184	522.1	0.000	0.008	100.0	0.000	87.931	0.012	0
YR 98	144	0.000	0.0	87.931	610.6	0.000	0.012	100.0	0.000	87.931	0.012	
1/99	31	0.000	0.0	14.878	479.9	0.000	0.000	0.0	0.000	102.808	0.012	0
2/99	25	0.000	0.0	11.670	466.8	0.000	0.080	100.0	0.000	114.479	0.092	0
3/99	31	0.000	0.0	13.325	429.8	0.000	0.000	0.0	0.000	127.803	0.092	0
4/99	30	0.000	0.0	11.331	377.7	0.000	0.006	100.0	0.000	139.134	0.098	0
5/99	16	0.000	0.0	5.685	355.3	0.000	0.000	0.0	0.000	144.819	0.098	0
6/99	30	0.000	0.0	11.329	377.6	0.000	0.000	0.0	0.000	156.149	0.098	0
7/99	31	0.000	0.0	9.809	316.4	0.000	0.000	0.0	0.000	165.957	0.098	0
8/99	31	0.000	0.0	8.867	286.0	0.000	0.000	0.0	0.000	174.824	0.098	0
9/99	30	0.000	0.0	8.602	286.7	0.000	0.000	0.0	0.000	183.426	0.098	0
10/99	31	0.000	0.0	7.960	256.8	0.000	0.000	0.0	0.000	191.387	0.098	0
11/99	30	0.000	0.0	7.005	233.5	0.000	0.000	0.0	0.000	198.392	0.098	0
12/99	31	0.000	0.0	6.498	209.6	0.000	0.000	0.0	0.000	204.890	0.098	0
1/00	31	0.000	0.0	6.432	207.5	0.000	0.000	0.0	0.000	211.322	0.098	0
2/00	29	0.000	0.0	5.855	201.9	0.000	0.000	0.0	0.000	217.178	0.098	0
YR 00	407	0.000	0.0	129.247	317.6	0.000	0.086	100.0	0.000	217.178	0.098	
SUB TOTAL	551	0.000	0.0	217.178	394.2	0.000	0.098	100.0	0.000	217.178	0.098	
TOTAL		0.000		217.178		0.000	0.098	100.0	0.000	217.178	0.098	

MALLON OIL COMPANY
W.I.: 1
R.I. (OIL):
R.I. (GAS): 0.752657

BLANCO EAST (OJO ALAMO)
JIC 460-16 #06 (OA)
1PDP - OJO ALAMO

Major Phase: GAS
Case: 375
NM0365OA
B Sec. 16 T30N R03W

1000
100000
10000

100
10000
1000

10
1000
100

1
100
10

— Oil (Bbl/Month)
- - - Gas (Mcf/Month)
+ Water (Units/Month)

90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09

MALLON OIL COMPANY
W.I.: 1

R.I. (OIL):

R.I. (GAS): 0.752657

BLANCO EAST (SAN JOSE)

JIC 460-16 #06 (SJ)

1PDP - SAN JOSE

Major Phase: GAS

Case: 434

NM0365SJ

B Sec. 16 T30N R03W

1000
100000
10000

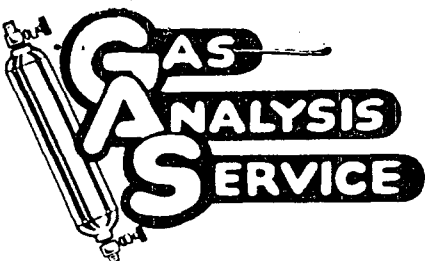
100
10000
1000

10
1000
100

1
100
10

— Oil (Bbl/Month)
- - - Gas (Mcf/Month)
+ Water (Units/Month)

90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09



2030 AFTON PLACE
FARMINGTON, N.M. 87401
(505) 325-6622

ANALYSIS NO. CES90205
CUST. NO. 16900- 10300

WELL/LEASE INFORMATION

CUSTOMER NAME CDS ENVIROMENTAL SVCS
WELL NAME JIC 460-16 # 6 OA
COUNTY/STATE RIO ARRIBA NM
LOCATION
FIELD
FORMATION OJO ALAMO
CUST.STN.NO.

SOURCE N/A
PRESSURE 61 PSI
SAMPLE TEMP DEG.F
WELL FLOWING N/A
DATE SAMPLED 7/12/99
SAMPLED BY JDW
FOREMAN/ENGR.

REMARKS MALLON OL COMPANY
H2S = 125 PPM

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR *
NITROGEN	0.187	0.0000	0.00	0.0018
CO2	0.046	0.0000	0.00	0.0007
METHANE	92.021	0.0000	931.53	0.5097
ETHANE	6.151	1.6454	109.10	0.0639
PROPANE	0.895	0.2467	22.57	0.0136
I-BUTANE	0.252	0.0824	8.21	0.0051
N-BUTANE	0.156	0.0492	5.10	0.0031
I-PENTANE	0.088	0.0322	3.53	0.0022
N-PENTANE	0.023	0.0083	0.92	0.0006
HEXANE PLUS	0.181	0.0790	9.31	0.0058
TOTAL	100.000	2.1432	1,090.27	0.6065

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

** @ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z) 1.0025
BTU/CU.FT (DRY) CORRECTED FOR (1/Z) 1,093.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z) 1,074.0
REAL SPECIFIC GRAVITY 0.6080

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

DRY BTU @ 14.650 1,087.1
DRY BTU @ 14.696 1,090.5
DRY BTU @ 14.730 1,093.0
DRY BTU @ 15.025 1,114.9

CYLINDER # GAS052A
CYLINDER PRESSURE 44 PSIG
DATE RUN 7/16/99
ANALYSIS RUN BY ANDREW ZEC



2030 AFTON PLACE
FARMINGTON, N.M. 87401
(505) 325-6622

ANALYSIS NO. CES90206
CUST. NO. 16900- 10305

WELL/LEASE INFORMATION

CUSTOMER NAME CDS ENVIROMENTAL SVCS
WELL NAME JIC 460-16 # 6 SJ
COUNTY/STATE RIO ARRIBA NM
LOCATION
FIELD
FORMATION SAN JOSE
CUST.STN.NO.

SOURCE N/A
PRESSURE 61 PSI
SAMPLE TEMP DEG.F
WELL FLOWING N/A
DATE SAMPLED 7/12/99
SAMPLED BY JDW
FOREMAN/ENGR.

REMARKS MALLON OIL COMPANY
H2S = 0 PPM

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR *
NITROGEN	0.734	0.0000	0.00	0.0071
CO2	0.014	0.0000	0.00	0.0002
METHANE	94.558	0.0000	957.21	0.5238
ETHANE	3.678	0.9839	65.24	0.0382
PROPANE	0.356	0.0981	8.98	0.0054
I-BUTANE	0.130	0.0425	4.24	0.0026
N-BUTANE	0.076	0.0240	2.49	0.0015
I-PENTANE	0.069	0.0252	2.77	0.0017
N-PENTANE	0.024	0.0087	0.96	0.0006
HEXANE PLUS	0.361	0.1575	18.56	0.0116
TOTAL	100.000	1.3399	1,060.45	0.5928

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

** @ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z) 1.0023
BTU/CU.FT (DRY) CORRECTED FOR (1/Z) 1,062.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z) 1,044.4
REAL SPECIFIC GRAVITY 0.5941

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

DRY BTU @ 14.650 1,057.1
DRY BTU @ 14.696 1,060.4
DRY BTU @ 14.730 1,062.9
DRY BTU @ 15.025 1,084.2

CYLINDER # 031A
CYLINDER PRESSURE 42 PSIG
DATE RUN 7/16/99
ANALYSIS RUN BY ANDREW ZEC