

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 _____

- DHC 4754
 - MACK Energy Corporation
 13837
 Well
 - Lost Given Feet #1
 30-015-41920
 Pool
 - Cass Drew's Bone
 Spring
 10380
 - WL-0156-06
 5232704H
 Upper Wulfcamp
 98125

- [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.

Deana Weaver _____ Deana Weaver _____ Production Clerk _____ 5.4.15 _____
 Print or Type Name Signature Title Date

dweaver@mec.com
 e-mail Address



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

RECEIVED OGD

2015 MAY -8 P 3: 09

May 4, 2015

Oil Conservation Division
Attn: Phillip R Goetze
1220 South St. Francis Dr.
Santa Fe, NM 87505

Re: Down Hole Commingling, and measurement of
Hydrocarbon Production for:
Lost River Fee #1
Section 23, T23S, R27E
Eddy County, New Mexico

Mack Energy Corporation as operator of the aforementioned well respectfully requests administrative approval for down hole commingling and measurement of production.

Mack Energy proposes to commingle Bone Spring and Upper Wolfcamp production in the Lost River Fee #1. Production of both pools will be measured at the TB located in the SE/4 SE/4, Sec. 23 T23S R27E. This lease has common interest in both pools. Notification has been made to all parties owning an interest in this lease, including the oil purchaser of the intent to commingle. Allocation will be done using the fixed allocation percentage.

Should you require any additional information concerning this application, please call Deana Weaver at 575-748-1288. Thank you for your consideration of this request.

Sincerely,

MACK ENERGY CORPORATION

Deana Weaver
Production Clerk
dweaver@mec.com

DW/
Enclosures

District I
1621 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 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

Mack Energy Corporation P.O. Box 960, Artesia, NM 88211-0960
Operator Address

Lost River Fee 1 P-23-23S-27E Eddy
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 013837 Property Code 40311 API No. 30-015-41920 Lease Type: Federal State Fee

| DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
|---|-----------------------------|------------------------------------|--------------------------------------|
| Pool Name | | Cass Draw; Bone Spring | WC-015 G-06 S232704H; Upper Wolfcamp |
| Pool Code | | 10380 | 98125 |
| Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | | 6834-9194' | 9194-9273' |
| 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) | | | |
| Oil Gravity or Gas BTU (Degree API or Gas BTU) | | 46.00 | 46.00 |
| Producing, Shut-In or New Zone | | Producing | New Zone |
| 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: _____ Rates: _____ | Date: 4/1/2015 Rates: 56/235/37 | Date: 4/1/2015 Rates: 2/10/2 |
| 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 _____ % % | Oil _____ Gas _____ 96 % 96 % | Oil _____ Gas _____ 4 % 4 % |

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- 1 02 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 Deana Weaver TITLE Production Clerk DATE 5.4.15

TYPE OR PRINT NAME Deana Weaver TELEPHONE NO. (575) 748-1288

E-MAIL ADDRESS dweaver@mec.com

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-6720
District II
511 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-2460 Fax: (505) 476-2462

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | | | |
|---|--|---|--|--|----------------------------------|
| ¹ API Number 30--15-41920 | | ² Pool Code 10380 | | ³ Pool Name Cass Draw; Bone Spring | |
| ⁴ Property Code 40311 | | ⁵ Property Name LOST RIVER FEE | | | ⁶ Well Number 1 |
| ⁷ OGRID No. 13837 | | ⁸ Operator Name MACK ENERGY CORPORATION | | | ⁹ Elevation 3132.8 |

¹⁰ Surface Location

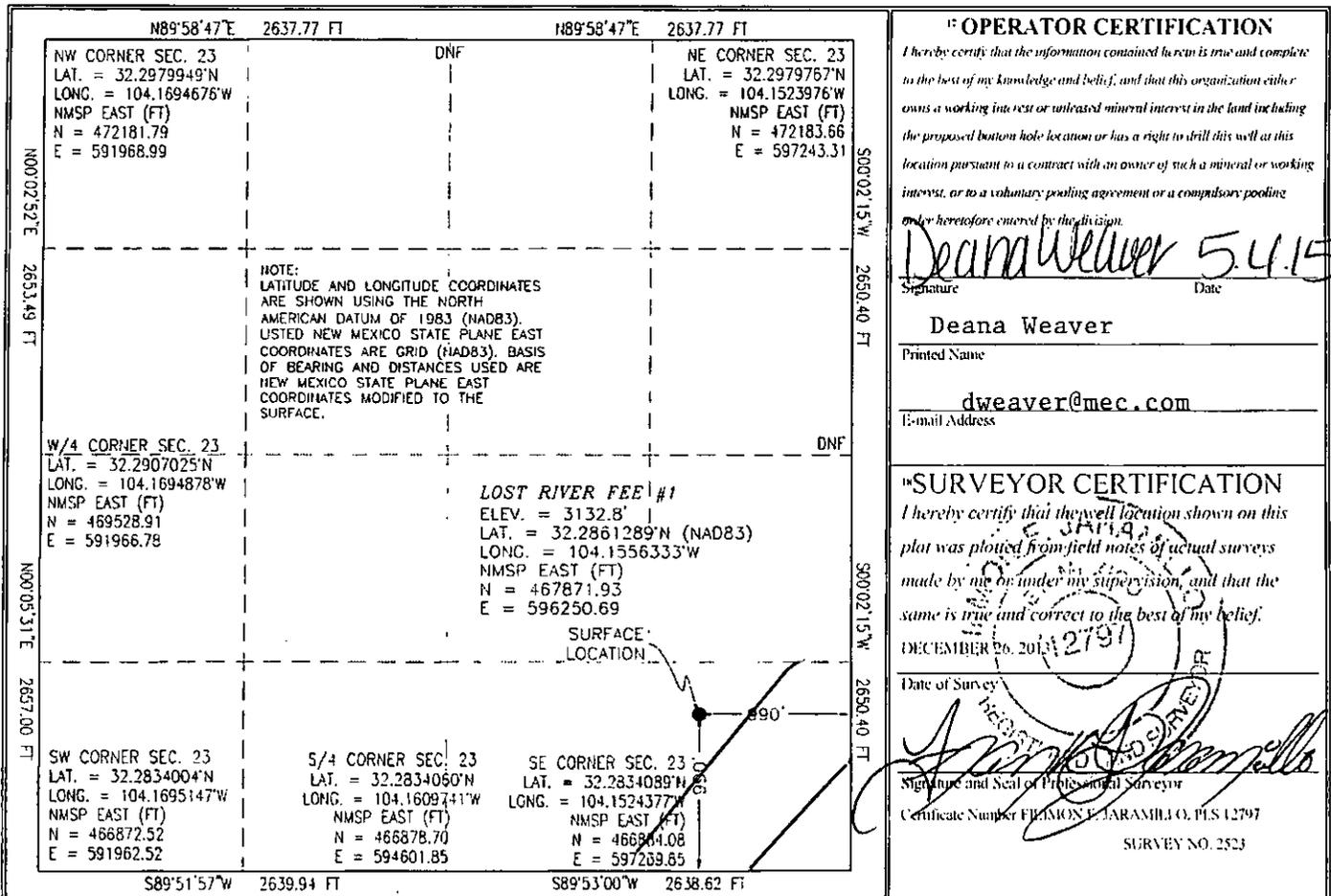
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| P | 23 | 23 S | 27 E | | 990 | SOUTH | 990 | EAST | EDDY |

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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|-------------------------------------|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres 40 | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ 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.



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Phone: (575) 393-6161 Fax: (575) 393-0720
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AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | | | |
|---|--|---|--|--|----------------------------------|
| ¹ API Number 30-015-41920 | | ² Pool Code 98125 | | ³ Pool Name WC-015 G-06 S232704H; Upper Wolfcamp | |
| ⁴ Property Code 40311 | | ⁵ Property Name LOST RIVER FEE | | | ⁶ Well Number 1 |
| ⁷ OGRID No. 13837 | | ⁸ Operator Name MACK ENERGY CORPORATION | | | ⁹ Elevation 3132.8 |

" Surface Location

| EL. or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|----------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| P | 23 | 23 S | 27 E | | 990 | SOUTH | 990 | EAST | EDDY |

" 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 |
|----------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|-------------------------------------|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres 40 | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ 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>N89°58'47"E 2637.77 FT</p> <p>NW CORNER SEC. 23 LAT. = 32.2979949°N LONG. = 104.1694676°W NMSP EAST (FT) N = 472181.79 E = 591968.99</p> | | <p>N89°58'47"E 2637.77 FT</p> <p>NE CORNER SEC. 23 LAT. = 32.2979767°N LONG. = 104.1523976°W NMSP EAST (FT) N = 472183.66 E = 597243.31</p> | | <p>17 OPERATOR CERTIFICATION 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>Deana Weaver</i> 5.4.15 Signature Date Deana Weaver Printed Name dweaver@mec.com E-mail Address</p> | |
| <p>NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE.</p> | | <p>W/4 CORNER SEC. 23 LAT. = 32.2907025°N LONG. = 104.1694878°W NMSP EAST (FT) N = 469528.91 E = 591966.78</p> | | <p>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. DECEMBER 26, 2011 2791 Date of Survey <i>Fernando Jaramillo</i> Signature and Seal of Professional Surveyor Certificate Number FERNANDO JARAMILLO, PLS 12797 SURVEY NO. 2523</p> | |
| <p>W/4 CORNER SEC. 23 LAT. = 32.2907025°N LONG. = 104.1694878°W NMSP EAST (FT) N = 469528.91 E = 591966.78</p> | | <p>LOST RIVER FEE #1 ELEV. = 3132.8' LAT. = 32.2861289°N (NAD83) LONG. = 104.1556333°W NMSP EAST (FT) N = 467871.93 E = 596250.69</p> | | <p>DATE OF SURVEY: DECEMBER 26, 2011 2791</p> | |
| <p>SW CORNER SEC. 23 LAT. = 32.2834004°N LONG. = 104.1695147°W NMSP EAST (FT) N = 466872.52 E = 591962.52</p> | | <p>S/4 CORNER SEC. 23 LAT. = 32.2834050°N LONG. = 104.1609711°W NMSP EAST (FT) N = 466878.70 E = 594601.85</p> | | <p>SE CORNER SEC. 23 LAT. = 32.2834089°N LONG. = 104.1524377°W NMSP EAST (FT) N = 466864.08 E = 597269.65</p> | |
| <p>S89°51'57"W 2639.94 FT</p> | | <p>SURFACE LOCATION</p> | | <p>S89°53'00"W 2638.62 FT</p> | |

MEMO

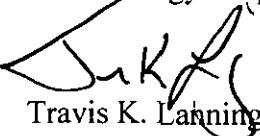
DATE: April 2, 2015
TO: NMOCD
FROM: Travis K. Lanning
RE: Lost River Fee #1
T23S, R27E, NMPM
Section 23: SE/4SE/4,
Eddy County, New Mexico

Mack Energy Corporation respectfully requests approval to downhole commingle production from the Bone Spring and Wolfcamp formations in our Lost River Fee No. 1.

All formations have identical working and revenue interests.

Please do not hesitate to contact me should you require any further information.

Sincerely,
Mack Energy Corporation


Travis K. Lanning
Land Manager

DIVISION OF INTEREST

Lost River Fee

Fee Lease

T23S, 27E, Eddy County, NM

Section 23: SW/4SE/4, E/2SE/4, EXCEPT beginning at a point on the North line of the SW/4SE/4, of Section 23, 690 feet West of the NE corner of the said SW/4SE/4, then West a distance of 208.7 feet, thence South at a right angle a distance of 208.7 feet, thence East a distance of 208.7 feet, thence North a distance of 208.7 feet to the point of beginning.

| OWNER# | OWNER | WI | NRI | TYP INT | SUS STAT |
|--------|---|------------|------------|---------|---------------|
| 016810 | Gumesinda C. Onsurez Revocable Trust dated April 7, 1997 Antonio C. Onsurez, Trustee P. O. Box 598 Loving, NM 88256 | | 0.25000000 | RI | DIVOR |
| 101 | Chase Oil Corporation P. O. Box 1767 Artesia, NM 88211-1767 | 0.85000000 | 0.63750000 | WI | MIN |
| 110 | Robert C. Chase P. O. Box 297 Artesia, NM 88211-0297 | 0.05000000 | 0.03750000 | WI | MIN |
| 185 | Ventana Minerals LLC P. O. Box 359 Artesia, NM 88211-0359 | 0.05000000 | 0.03750000 | WI | MIN |
| 195 | DiaKan Minerals LLC P. O. Box 693 Artesia, NM 88211 | 0.05000000 | 0.03750000 | WI | MIN |
| | TOTAL | 1.00000000 | 1.00000000 | | |
| | | | | | |
| | | | | | 1-15-2015 /dh |



P.O. Box 960
Artesia, NM 88211-0960
Office (575) 748-1288
Fax (575) 746-9539

May 4, 2015

Antonio C. Onsurez, Trustee
P.O. Box 598
Loving, NM 88256

VIA CERTIFIED MAIL 7014 1820 0001 6619 1944
CERTIFIED RETURN RECEIPT MAIL

Dear Sir:

This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to Down Hole Commingle production from the Bone Spring and Upper Wolfcamp in the Lost River Fee #1 located in Sec. 23 T23S R27E, 990 FSL & 990 FEL, Eddy County, New Mexico.

Should you have any objection, it must be filed in writing within twenty (20) days from the date of this notice. The Division Director may approve the DHC application if no objection has been made within the 20 days after the application has been received.

Sincerely,

A handwritten signature in cursive script that reads "Deana Weaver".

Deana Weaver
Production Clerk
dweaver@mec.com

DW/

Enclosures

McMillan, Michael, EMNRD

From: Deana Weaver <dweaver@mec.com>
Sent: Monday, May 11, 2015 10:13 AM
To: McMillan, Michael, EMNRD
Cc: Jerry Sherrell
Subject: FW: Derrick Fee #1 Bone Spring/Wolfcamp Split Data
Attachments: Den Spoon Water (2).pdf

Michael,

Mack Energy has perforated and produced some of our wells in the Carlsbad area. It was discovered that the bottom section of perforations were actually in the Wolfcamp formation. After meeting with Paul Kautz and Randy Dade to discuss this issue, we agreed to test one of the wells(Derrick Fee #1) and use this data for all wells within this area.

The water analysis for the Den SWD #1 and Spoon SWD #1 is attached.

Isolated Wolfcamp perms, Bone Spring Production Only

| Date: | Oil | Gas | Water |
|-----------|-----|-----|-------|
| 3/22/2015 | 22 | 154 | 87 |
| 3/23/2015 | 25 | 152 | 127 |
| 3/24/2015 | 25 | 152 | 117 |
| 3/25/2015 | 22 | 161 | 119 |
| 3/26/2015 | 25 | 134 | 111 |
| 3/27/2015 | 22 | 140 | 141 |
| 3/28/2015 | 25 | 152 | 85 |

Commingled Wolfcamp and Bone Spring

| Date: | Oil | Gas | Water |
|-----------|-----|-----|-------|
| 4/30/2015 | 28 | 153 | 146 |
| 5/1/2015 | 22 | 153 | 162 |
| 5/2/2015 | 25 | 161 | 236 |
| 5/3/2015 | 25 | 159 | 150 |

Commingled Bone Spring and Wolfcamp Avg:

Avg: 25 Oil, 157 MCF, 173 Water

Bone Spring Only Avg:

Avg: 24 Oil, 149 MCF, 112 Water

Avg: 96% Oil

Wolfcamp Only Avg:

Avg: 1 Oil, 8 MCF, 61 Water

Avg: 4% Oil