

Order Number

DHC
HDS-0315

API Number

30-025-15926

Operator

Marathon Oil Co

County

Lea / ST

Order Date

5/18/09

Well Name

McDonald State A/c-2

Number

30

Location

A

UL

13

Sec

22s

T (+Dir)

36e

R (+Dir)

Oil %

50%

Gas %

33%

Pool 1

06660

Blindery D/G <Oil>

Pool 2

86440

Tubb Oil & Gas <Gas>

50%

67%

Pool 3

Pool 4

Comments.

Posted RBOMS 5/28/09 dm

DOWNHOLE COMMINGLE CALCULATIONS:

BHC-HOB-D315
Api # 30-025-25926
L.H.

OPERATOR: Marathon Oil Co

PROPERTY NAME: McDonald State Ac-2

WNULSTR: # 30-A, 13-229-360

SECTION I:		ALLOWABLE AMOUNT		
POOL NO. 1	<u><06660> Blinberry O&G <O.I></u>	<u>107</u>	<u>428</u> MCF	<u>4000</u>
POOL NO. 2	<u><86440> Tubbs O & G <GAS></u>	<u>142</u>	<u>284</u> MCF	<u>2000</u>
POOL NO. 3	_____	_____	_____ MCF	
POOL NO. 4	_____	_____	_____ MCF	
POOL TOTALS		<u>249</u>	_____	_____

SECTION II:				
POOL NO. 1	<u>Blinberry O&G <O.I></u>	<u>8.1</u>		<u>GRS</u>
POOL NO. 2	<u>Tubbs O&G <GAS></u>	<u>50%</u>		<u>33%</u>
POOL NO. 3	_____			
POOL NO. 4	_____			
		<u>50% x 249 = 124.5</u>		<u>6790</u>
		<u>(125)</u>		

	<u>OIL</u>	<u>GAS</u>
SECTION III:		
	<u>142 ÷ 50% = 284</u>	_____
SECTION IV:		
	<u>284 x 50% = 142</u>	_____
	<u>284 x 50% = 142</u>	_____
	_____	_____
	_____	_____

Marathon Oil Company
Office

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., 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-103

June 19, 2008

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-25926
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Marathon Oil Company		6. State Oil & Gas Lease No.
3. Address of Operator 5555 San Felipe Houston, Texas 77056 Mail Stop #3308		7. Lease Name or Unit Agreement Name McDonald State A/C-2
4. Well Location Unit Letter <u>A</u> <u>660'</u> feet from the <u>North</u> line and <u>330'</u> feet from the <u>East</u> line Section <u>13</u> Township <u>22-S</u> Range <u>36-E</u> NMPM County <u>Lea</u>		8. Well Number #30
11. Elevation (Show whether DR., RKB, RT, GR, etc.) 3,443' GL, 3,454' KB		9. OGRID Number 14021
12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data		10. Pool name or Wildcat 'TUBB'

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐

OTHER: ☐OTHER: 'DHC'-TUBB & Blinebry per Order #11363 ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

****Marathon Oil Company has completed operations to recomplate the 'TUBB', test the new zone, and is requesting approval to proceed with the 'DHC' per Order #11363' for the 'Tubb & Blinebry'. Please see required attachments provided.**

DHC-HOB-0315

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

SIGNATURE Rick R. Schell TITLE: Regulatory Compliance Representative DATE: 30-DEC-2008

Type or print name: Rick R Schell E-mail address: RRSCHELL@MarathonOil.com PHONE: 713-296-3412

For State Use Only

APPROVED BY: [Signature] TITLE: _____

DATE 5/18/2009

Conditions of Approval (if any): _____

District I

1625 N. French Drive, Hobbs, NM 88240

District II

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State of New Mexico
Energy, Minerals and Natural Resources Department

Oil Conservation Division

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

Form C-107A
 Revised June 10, 2003

APPLICATION TYPE

☒ **Single Well**
☐ **Establish Pre-Approved Pool**
EXISTING WELLBORE
☒ **Yes** ☐ **No**

APPLICATION FOR DOWNHOLE COMMINGLING

Marathon Oil Company 5555 San Felipe (Mail Stop #3308) Houston, Texas 77056

Operator**MCDONALD STATE A/C-2****Address**

#30

A - 13 - 22S - 36E

Lea**Lease****Well No.****Unit Letter-Section-Township-Range****County**

OGRID No.: 014021 Property Code: 006436 API No.: 30-025-25926 Lease Type: Federal: ☒ State: ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	BLINEBRY		TUBB
Pool Code	06660		86440
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	5,452' - 5,686'		6,249' - 6,322'
Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
Bottom-hole 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)	35.5		36.4
Producing, Shut-In, or New Zone	Shut-In		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: January 2008 Rates: Oil(bbl/day)=10.9 Gas(mcf/day)=2.9 Water(bbl/day)=36.4	Date: Rates:	Date: January 2008 Rates: Oil(bbl/day)=10.9 Gas(mcf/day)=6.84 Water(bbl/day)=84.9
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required)	Oil 50 % Gas 33 %	Oil % Gas %	Oil 50 % Gas 67 %

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? n/aYes ☐ 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? n/aYes ☐ 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. (Common Interest)

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 Rick R. Schell TITLE: Regulatory Compliance Representative DATE: 12-30-2008TYPE OR PRINT NAME: Rick R. Schell TELEPHONE: (713) 296-3412 E-MAIL ADDRESS: rrschell@marathonoil.com

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RECEIVED

MAY 12 2008

HOBBSOCDState of New Mexico
Energy, Minerals & Natural Resources Department

CONSERVATION DIVISION

1220 South St. Francis 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

¹ API Number 30-025-25926		² Pool Code 6660	³ Pool Name Blinberry Oil and Gas
⁴ Property Code 006436	⁵ Property Name Mc Donald State AC 2		⁶ Well Number 30
⁷ OGRID No. 14021	⁸ Operator Name Marathon Oil Company		⁹ Elevation 3443'

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
A	13	22-S	36-E		660'	North	330'	East	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

¹² Dedicated Acres 40	¹³ Joint or Infill N	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.

¹⁶ 	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 released 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.	
	Signature: <i>Rich R. Schell</i> Date: <i>12-30-08</i>	
	Printed Name: <i>Rich R. Schell</i>	
	REGULATORY COMPLIANCE REP	
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.	Date of Survey:	
	Signature and Seal of Professional Surveyor:	
	Certificate Number:	

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State of New Mexico
Energy, Minerals & Natural Resources Department
MAY 01 2008
OIL CONSERVATION DIVISION
HOBBS
1220 South St. Francis 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

1 API Number 30-025-25926		2 Pool Code 86440		3 Pool Name TUBB	
4 Property Code 006436		5 Property Name Mc Donald State AC 2			6 Well Number 30
7 OGRID No. 14021		8 Operator Name Marathon Oil Company			9 Elevation 3443'

10 Surface Location

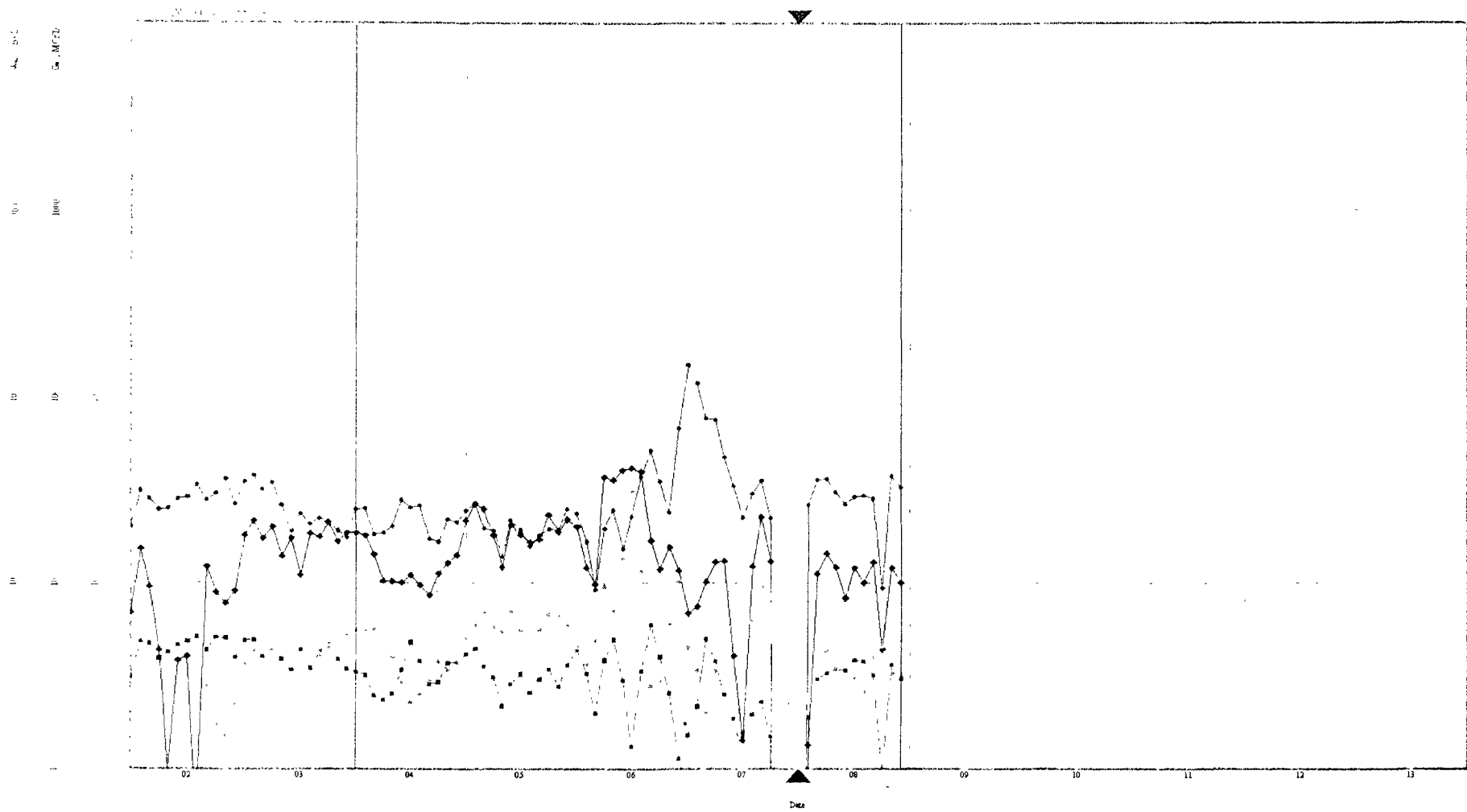
UL or lot no. A	Section 13	Township 22-S	Range 36-E	Lot Idn	Feet from the 660'	North/South line North	Feet from the 330'	East/West line East	County Lea
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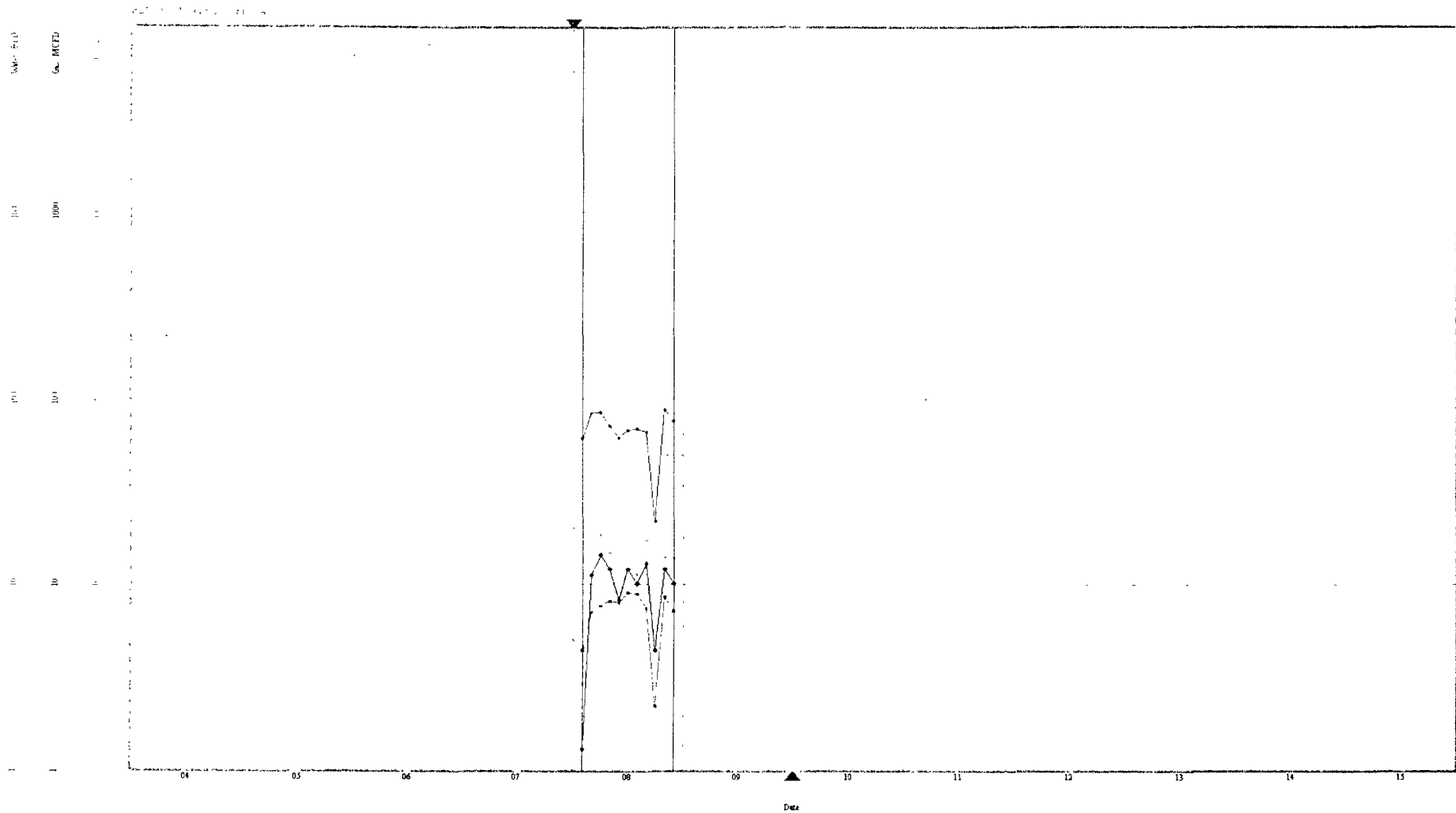
11 Bottom Hole Location If Different From Surface

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 N		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.

<div>16</div>				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. <div>Signature: <i>Rich R. Schell</i> Date: <i>12-30-08</i></div> <div>Printed Name: <i>Rich R. Schell</i></div> <div>Regulatory Compliance Rep.</div>	
				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. <div>Date of Survey</div> <div>Signature and Seal of Professional Surveyor:</div>	
				<div>Certificate Number</div>	





McDonald State AC 2 #30
Downhole Commingle
Tubb and Blinebry Formations

Allocations percentages for the down hole commingled wellbore were calculated by using average daily production for the last thirty days of production for each pool as follows:

	Oil (bbl/day)	Gas (mcf/day)	Water (bbl/day)	
Blinebry	10.9	2.9	36.4	Used January 2008 Data
Tubb	<u>10.9</u>	<u>6.84</u>	<u>84.9</u>	Used January 2008 Data
Totals	21.8	9.74	121.3	

Percentages	Oil	Gas	Water
Blinebry	$10.9/21.8 = 50\%$	$2.9/9.74 = 33\%$	$36.4/121.3 = 30\%$
Grayburg	$10.9/21.8 = 50\%$	$6.84/9.74 = 67\%$	$84.9/121.3 = 70\%$

WellTest History

Select By : Completions

Wednesday, January 07, 2009

Pressure Base : None

Units : A P L

Rounded (y/n) : No

Page No : 1

Report Number : R_012

Print Date : 1/7/2009, 2:38:18 PM

Sort By : None selected in Report Options.

Test Date	Effective Date	Meas Hours	24 Hour Volumes					Ratios				PPM		Pressures - Hi/Lo		ShutIn		Equipment					
			Gr Liquid	Oil	Gas	Water	Lift	Emul%	GOR	WOR	GFR	Chi	Iron	Tubing	Casing	Press	Hrs	Ck	Stk	Sz	Pur		
Completion: MCDONALD STATE AC 2 NO 30, Type: Production - Oil, Method: Sucker Rod																							
1/12/2008	1/12/2008	24	132.20	7.20	18.70	125.00	.00	2,597.222	17.361	141.452			0	0			0	86		A			
1/13/2008	1/13/2008	24	146.00	12.00	17.70	134.00	.00	1,475.000	11.167	121.233			0	0			0	86		A			
1/14/2008	1/14/2008	24	129.00	11.00	20.00	118.00	.00	1,818.182	10.727	155.039			0	0			0	86		A			
1/15/2008	1/15/2008	24	145.90	9.90	18.50	136.00	.00	1,868.687	13.737	126.799			0	0			0	86		A			
Avg-- 01/2008			138.28	10.03	18.73	128.25	.00																
2/17/2008	2/17/2008	24	157.00	13.00	27.40	144.00	.00	2,107.692	11.077	174.522			0	0			0	86		A			
3/11/2008	3/11/2008	24	145.70	12.70	31.00	133.00	.00	2,440.945	10.472	212.766			0	0			0	86		A		05	
3/20/2008	3/20/2008	24	142.00	12.00	31.00	130.00	.00	2,583.333	10.833	218.310			0	0			0	86		A		05	
Avg-- 03/2008			143.85	12.35	31.00	131.50	.00																
4/15/2008	4/15/2008	24	129.00	15.00	34.00	114.00	.00	2,266.667	7.600	263.566			0	0			0	86		A		05	
5/9/2008	5/9/2008	24	130.00	13.00	33.00	117.00	.00	2,538.462	9.000	253.846			0	0			0	86		A		05	
6/9/2008	6/9/2008	24	124.50	12.70	31.00	111.80	.00	2,440.945	8.803	248.996			0	0			0	86		A		05	
7/9/2008	7/9/2008	24	121.00	12.00	30.00	109.00	.00	2,500.000	9.083	247.934			0	0			0	86		A		05	
8/9/2008	8/9/2008	24	122.00	12.00	30.00	110.00	.00	2,500.000	9.167	245.902			0	0			0	86		A		05	
9/3/2008	9/3/2008	24	121.00	11.00	30.00	110.00	.00	2,727.273	10.000	247.934			0	0			0	86		A		05	
10/3/2008	10/3/2008	24	121.00	11.00	30.00	110.00	.00	2,727.273	10.000	247.934			0	0			0	86		A		05	
11/5/2008	11/5/2008	24	118.00	10.00	30.00	108.00	.00	3,000.000	10.800	254.237			0	0			0	86		A		05	
12/15/2008	12/15/2008	24	115.00	10.00	30.00	105.00	.00	3,000.000	10.500	260.870			0	0			0	86		A		05	
Avg - Completion			131.21	11.53	27.64	119.68	.00																