	30.08 SUSPENSE	W. JONES	12:30.08	DATC )	PKAA083654248
		V MEXICO OIL CO	ering Bureau -		30-015-2627 Fill 10-10-004 HARBOB 14049
	ADI	MINISTRATIV	E APPLICATI	ON CHEC	KLIST
٦	THIS CHECKLIST IS MANDAT		TIVE APPLICATIONS FOR E CESSING AT THE DIVISION		VISION RULES AND REGULATIONS
	[DHC-Downhole [PC-Pool Co [WFX	• •• •	B-Lease Commingling Off-Lease Storage] m] [PMX-Pressure I losal] [IPI-Injection	] [PLC-Pool [OLM-Off-Leas Maintenance E Pressure Incre	Lease Commingling] e Measurement] [xpansion] ease]
[1]		CATION - Check Tho cation - Spacing Unit - NSL NSP		-	
		Only for [B] or [C] mmingling - Storage - DHC CTB [	Measurement	OLS	OLM
	[C] Inje	ection - Disposal - Pres WFX D PMX [	sure Increase - Enhanc		ry PPR
	[D] Oth	ner: Specify			
[2]	NOTIFICATION [A]	<b>REQUIRED TO: -</b> Cl Working, Royalty or	heck Those Which App Overriding Royalty In		Not Apply
	[B]	Offset Operators, Lea	aseholders or Surface (	Dwner	
	[C]	Application is One W	/hich Requires Publish	ed Legal Notic	ce
	[D] X	Notification and/or C U.S. Bureau of Land Manageme	Concurrent Approval by nt - Commissioner of Public Lands	/ BLM or SLO , State Land Office	
	[E] X		Proof of Notification o		
	[F]	Waivers are Attached	1		
[3]		ATE AND COMPLE N INDICATED ABO		REQUIRED	TO PROCESS THE TYPE

,

[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.

BRIAN COLLINS	milille	PETROLEUM ENGINEER	12/19/08
Print or Type Name	Signature	Title	Date

bcollins@marbob.com

e-mail Address

District I

с г. <sup>1</sup> г.

1625 N. French Drive, Hobbs, NM 88240 District II

1301 W. Grand Av sia, NM 88210 District III Artee, NM \$7410

District IV 1220 S. St. Francis Dr., Santa Fc, NM 87505 **Oil Conservation Division** 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

APPLICATION TYPE X\_Single Well Establish Pre-Approved Pools EXISTING WELLBORE <u>X</u> Yes <u>No</u>

#### APPLICATION FOR DOWNHOLE COMMINGLING

MARBOB ENERGY COR	PORATION	P O BOX 227	ARTESIA, NM 88210
Operator		Address	DHC-4140
FOSTER EDDY	9	J - 17 - T17S - R31E	EDDY
Lease	Well No.	Unit Letter-Section-Township-Range	County
OGRID No. <u>14049</u> Fee	Property Code 6514	API No. <u>30-015-2627</u>	3 Lease Type: <u>X</u> FederalState

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Grayburg Jackson 7R-Q-GB-SA		Cedar Lake Yeso
Pool Code	28509		96831
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2886-3900' Perf		4743-5342' Perf
Method of Production (Flowing or Artificial Lift)	A/L		A/L
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 performion in the upper zone)	~100 psi producing BHP well is pumped off		~100 psi producing BHP well is pumped off
Oil Gravity or Gas BTU (Degree API or Gas BTU)	35.1° API		37.9° API
Producing, Shut-In or New Zone	Producing		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: see engineering summary Rates:	Date: Rates:	Date: see engineering summary Rates:
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 27 % 5 %	Oil Gas % %	Oil Gas 73 % 95 %

#### **ADDITIONAL DATA**

Are all working, royalty and overriding royalty interests identical in all commingled zones? If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?	Yes_ <u>X</u> Yes	No No	
Are all produced fluids from all commingled zones compatible with each other?	Yes <u>X</u>	No <u></u>	
Will commingling decrease the value of production?	Yes	No <u>X</u> .	
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_X	No	
NMOCD Reference Case No. applicable to this well:N/A			
Attachments: C-102 for each zone to be commingled showing its spacing unit and acreage dedication.			

C-102 101 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 SIGNATURE	the best of my knowledge and belief.
SIGNATURE / 2m Allen TITLE_	PETROLEUM ENGINEER DATE 12/19/08
TYPE OR PRINT NAME BRIAN COLLINS	

Submit to Appropriate District Office State Lease - 4 copies Fee Lease - 3 copies

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

DISTRICT III 1000 Rio Brazos Rd., Aztoc, NM 87410

#### State of New Mexico Energy, Minerals and Natural Resources Department

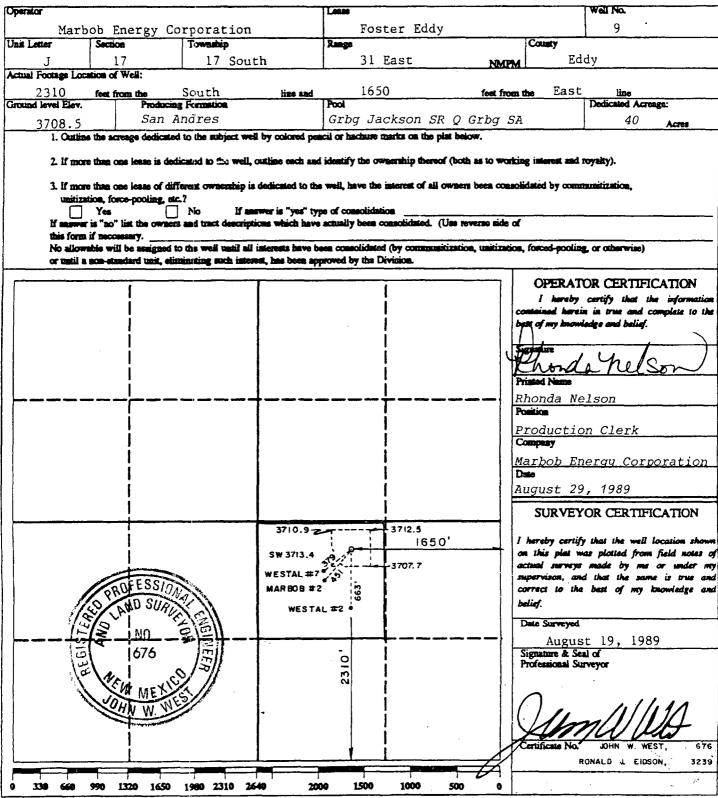
### **OIL CONSERVATION DIVISION**

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

AUG 2 3 1989

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section



# Engineering Summary Form C-107A Application for Downhole Commingling

Marbob Energy Corporation Foster Eddy 6 (C-17-17S-31E) Foster Eddy 7 (B-17-17S-31E) Foster Eddy 8 (C-17-17S-31E) Foster Eddy 9 (J-17-17S-31E) Foster Eddy 10 (F-17-17S-31E) Foster Eddy 11 (J-17-17S-31E)

Marbob Energy proposes the following zonal allocation between the Grayburg San Andres (Grayburg Jackson 7R-Q-GB-SA 28509) and the Yeso (Cedar Lake Yeso 96831) in the captioned wells. We propose to use the same zonal allocation for each well for simplicity, since the Grayburg San Andres and Yeso were commingled on the initial completion without separate zonal testing. No zonal crossflow has occurred because these wells have been rod pumped in a pumped down condition.

To determine the zonal allocation, we calculated the estimated ultimate recoveries (EUR) for the nearby Grayburg San Andres wells and our nearby Yeso wells and used the EUR ratios to calculate the percentage allocations for oil and gas.

Grayburg San Andres: (Production plots with calculations attached)

		EUR	EUR
Relative Location	No. Wells	Oil	Gas
East, West, South Offsets	16	919 MBO	484 MMCF
North Offsets	7	339 MBO	205 MMCF
Total	23	1258 MBO	689 MMCF

EUR/well = 55	5 MBO / 30	MMCF
---------------	------------	------

Yeso: (Production plots with calculations attached)

			EUR	EUR
Lease	Relative Location	No. Wells	Oil	Gas
Tony Federal	East, Southeast	29	4428 MBO	15558 MMCF
Lee Federal	South	29	4500 MBO	19482 MMCF
Coffee Federal	East	9	1267 MBO	3151 MMCF
Total		67	10195 MBO	38191 MMCF

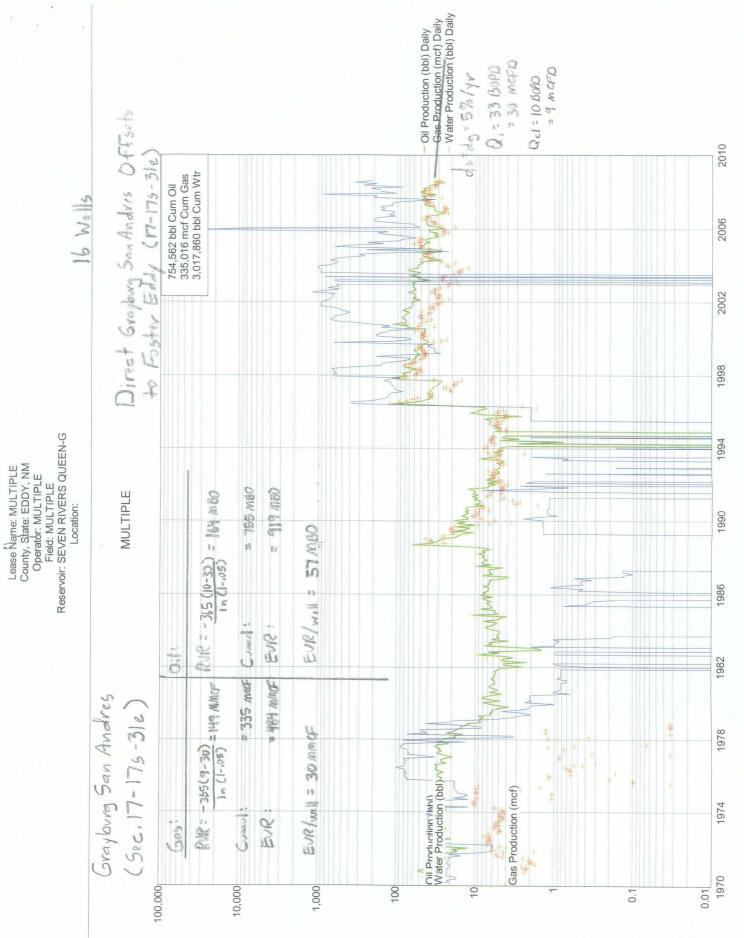
EUR/well = 152 MBO / 570 MMCF

n na serie de la composición d

## Zonal Allocation:

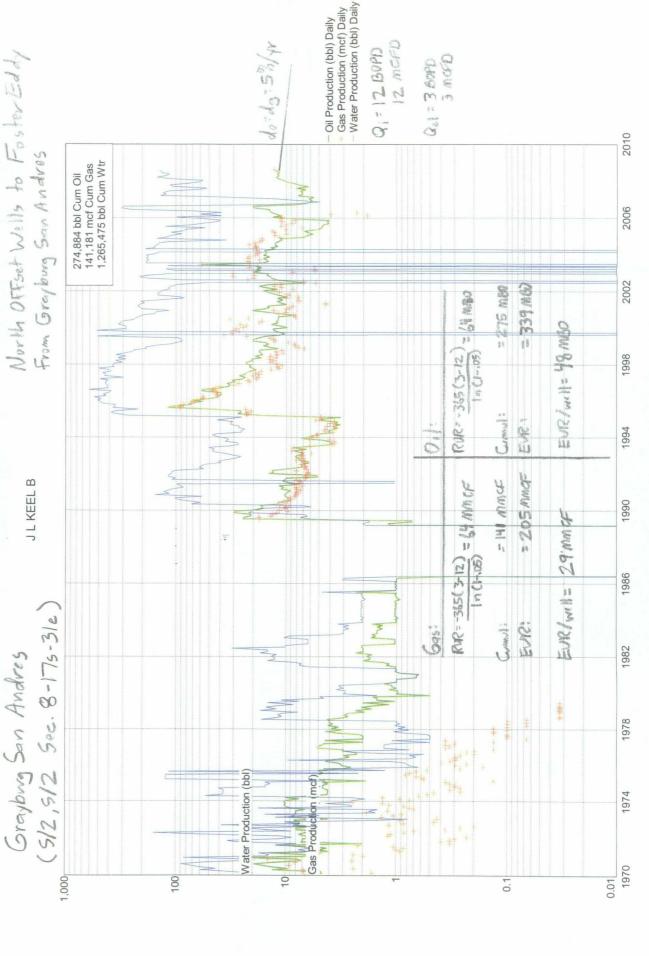
Grayburg San Andres Oil :	<u>55 MBO</u> 55 + 152 MBO	= .266 say 27%
Yeso Oil :	100 - 27	= 73%
Grayburg San Andres Gas :	<u>30 MMCF</u> 30 + 570 MMCF	= .05 say 5%
Yeso Gas :	100 - 5	= 95%

.



Production Rates (bpd, mctd)

Time



Production Rates (bpd, mcfd)

Lease Name: J L KEEL B County, State: EDDY, NM Operator: MERIT ENERGY COMPANY Field: GRAYBURG JACKSON Reservoir: SEVEN RIVERS QUEEN-G Location:

7 Wells

Time

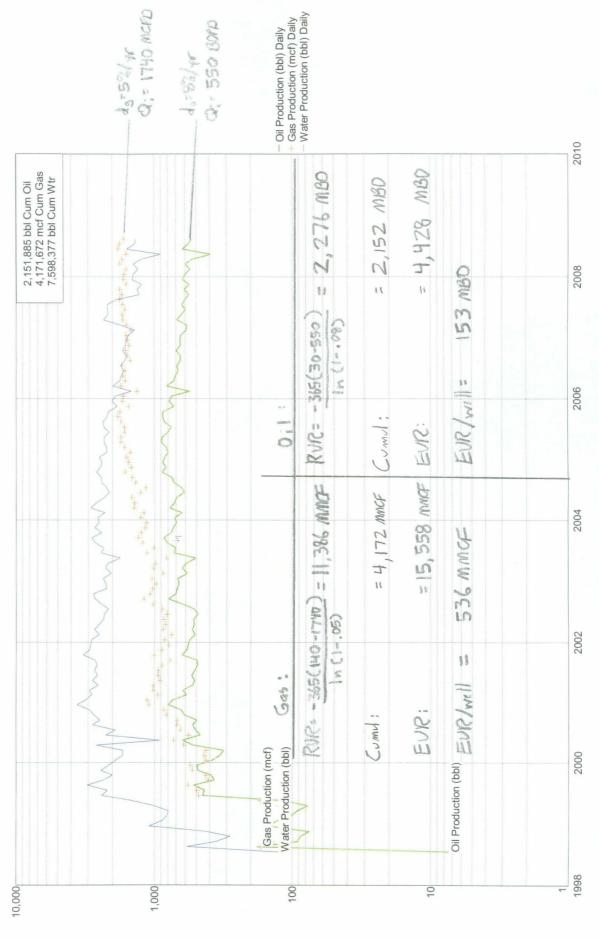
Lease Nam<sup>t</sup>e: TONY FEDERAL County, Ståte: EDDY, NM Operator: MARBOB ENERGY CORPORATION Field: MULTIPLE Reservoir: MULTIPLE Location:

29 Wells

.



Teso (Sec 18#19, 175-310





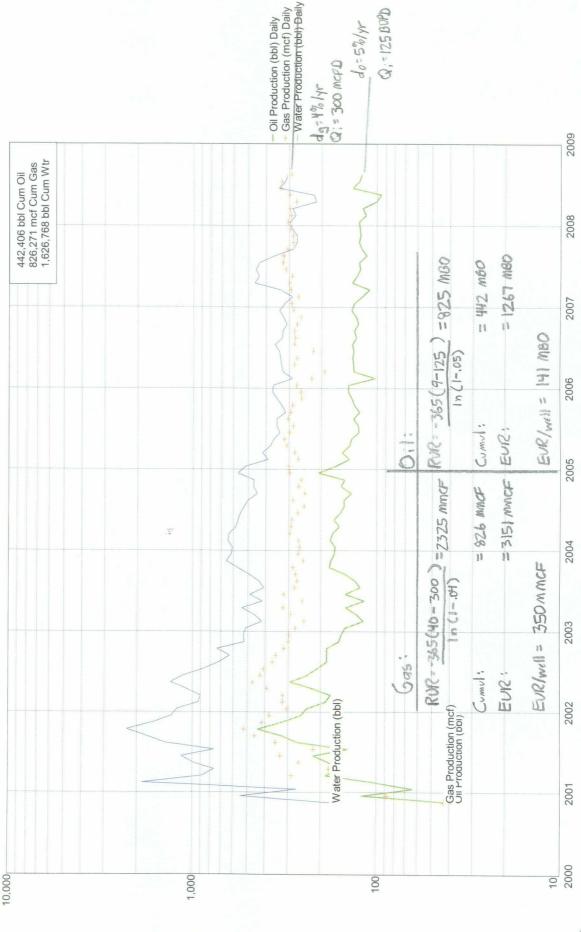
Time

Lease Name! COFFEE FEDERAL County, State: EDDY, NM Operator: MARBOB ENERGY CORPORATION Field: CEDAR LAKE Reservoir: YESO Location:

9 Wells

COFFEE FEDERAL

leso (Sec. 18-175-310)



Submit 3 Copies To Appropriate District	State of New M	Aexico	Form C-103
Office, , , , <u>District I</u>	Energy, Minerals and Na	itural Resources	June 19, 2008 WELL API NO.
1625 N. French Dr., Hobbs, NM 88240 <u>District II</u>	OIL CONSERVATIO	2	0-015-26273
1301 W. Grand Ave., Artesia, NM 88210 District III	1220 South St. Fi		5. Indicate Type of Lease STATE FEE
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM		5. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM 87505			
SUNDRY NOTICI	ES AND REPORTS ON WEL		7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPOSA DIFFERENT RESERVOIR. USE "APPLICA"		TOD QUQU	FOSTER EDDY
PROPOSALS.) 1. Type of Well: Oil Well 🛛 G	as Well 🔲 Other		8. Well Number 9
2. Name of Operator			0. OGRID Number
	ENERGY CORPORATION		4049
3. Address of Operator P O BOX 2 ARTESIA	227 NM 88211-0227		0. Pool name or Wildcat GRAYBURG JACKSON; SR-Q-G-SA
4. Well Location			
Unit Letter J : 2310		line and1650	feet from theEASTline
Section 17	Township 17S 11. Elevation (Show whether L	Range 31E	NMPM EDDY County
	3708.5' GR	r, rrd, r1, Gr, elc.)	
12. Check Ap	propriate Box to Indicate	Nature of Notice, Re	eport or Other Data
NOTICE OF INT	ENTION TO:	SUBSE	EQUENT REPORT OF:
		REMEDIAL WORK	
	CHANGE PLANS	COMMENCE DRILL CASING/CEMENT J	
OTHER: DOWNHOLE COMMINGL	NG	OTHER:	
13. Describe proposed or complet	ed operations. (Clearly state a	ll pertinent details, and g	ive pertinent dates, including estimated date
of starting any proposed work or recompletion.	). SEE RULE 1103. For Mul	tiple Completions: Attac	h wellbore diagram of proposed completion
SEE ATTACHED C-107A APPL	ICATION FOR DOWNHOLE	COMMINGLING	
THE PROPOSED ALLOCATION	NIS: GRAYBURG JACKSO	N 7R-O-GB-SA 28509 -	OIL 27% - GAS 5%
		96831 - OIL 73% - GAS	
NEW ALLOCATIONS WELL B	E SUBMITTED IF ACTUAL	WILL PRODUCTION I	S SIGNIFICANTLY
DIFFERENT THAN THAT ABC			
I hereby certify that the information ab	ove is true and complete to the	best of my knowledge a	nd belief.
lih . 1	lille.		
SIGNATURE	TITLE	PETROLEUM ENGIN	<u>EER</u> DATE <u>12/19/08</u> .
Type or print name BRIAN COL	LINS E-mail address:	bcollins@marbob.c	om PHONE: 575-748-3303
For State Use Only			
APPROVED BY:	TITLE		DATE

С	co	n	di	tio	ons	of	A	ъ	pro	val	(if	any	):

- • • • •						
Form 3160-5 UNITED STATES (August 2007) DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT					FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010 5. Lease Serial No.	
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.					NMLC049998 (A) 6. If Indian, Allottee or Tribe Name	
SUBMIT IN TRIPLICATE ~ Other instructions on page 2.					7. If Unit of CA/Agreement, Name and/or No.	
1. Type of Well       Image: Oil Well     Image: Gas Well     Other					8. Well Name and No. FOSTER EDDY #9	
2. Name of Operator MARBOB ENERGY CORPORATION					9. API Well No. 30-015-26273	
P O BOX 227 ARTESIA NM 88211-0227 575-748-3303			(include area coa 3	le)	10. Field and Pool or Exploratory Area GRAYBURG JACKSON; SR-Q-GRBG-SA	
<ol> <li>Location of Well (Footage, Sec., T., R., M., or Survey Description) SEC. 17-T17S-R30E</li> <li>2310 FSL 1650 FEL, UNIT J</li> </ol>					11. Country or Parish, State EDDY COUNTY, NM	
12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA						
TYPE OF SUBMISSION TYPE OF ACT					ION	
Notice of Intent Subsequent Report	Acidize Alter Casing Casing Repair Change Plans	New	en ure Trcat Construction and Abandon	Recla	uction (Start/Resume) amation mplete porarily Abandon	Water Shut-Off Well Integrity Other DOWNHOLE COMMINGLING
Final Abandonment Notice	Convert to Injection	Plug		`	er Disposal	
the proposal is to deepen directic Attach the Bond under which the following completion of the invo testing has been completed. Fina determined that the site is ready SEE ATTACHED C-107A AP THE PROPOSED ALLOCAT NEW ALLOCATIONS WILL E THAT ABOVE.	onally or recomplete horizonta e work will be performed or pr lved operations. If the operat al Abandonment Notices must for final inspection.) PLICATION FOR DOWNHO ON IS: GRAYBURG JACK CEDAR LAKE YES DE SUBMITTED IF ACTUAL	Ily, give subsurf ovide the Bond ion results in a n be filed only aff OLE COMMING SON 7R-Q-GE O 96831 - OIL - WELL PROD	ace locations and a No. on file with B nultiple completion er all requirements GLING 3-SA 28509 - OII 73% - GAS 95%	measured ar LM/BIA. R n or recomp s, including L 27% - GA	nd true vertical depths of Required subsequent rep letion in a new interval reclamation, have been	
14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)         BRIAN COLLINS         7					INEER	
Signature I mi	Date 12/19/2008					
	THIS SPACE	FOR FEDE	·		FICE USE	
Approved by						
Conditions of approval, if any, are attach that the applicant holds legal or equitable entitle the applicant to conduct operation	title to those rights in the subje				1	Date
Title 18 U.S.C. Section 1001 and Title 4 fictitious or fraudulent statements or rep				d willfully to	o make to any departmer	nt or agency of the United States any false,

(Instructions on page 2)