Form 3160-3 August 1999)	OCD-HOI	BBS	OMB No.	PPROVED . 1004-0136
	O STATES OF THE INTERIOR		Expires Nove	ember 30, 2000
	D MANAGEMENT		5. Lease Serial No. NMNM 110843	
	IT TO DRILL OR RI	EENTER	6. If Indian, Allottee or T	ribe Name
1a. Type of Work: DRILL REENTER	CONFID	ENTIAL	7. If Unit or CA Agreeme	nt, Name and No.
		gle Zone 🔲 Multiple		No. NL 3 34549
2. Name of Operator Con CHESAPEAKE OPERATING INC 14-017	tact: LINDA GOOD 9 E-Mail: Igood@chkener	gy.com	9. API Well No.	
3a. Address P O BOX 18496 OKLAHOMA CTIY, OK 73154	3b. Phone No. (inclu Ph: 405.767.427 Fx: 405.879.958	'5	30-025- 10. Field and Pool, or Exp BRONCO, W.M	ploratory Ifcamp 7600
4. Location of Well (Report location clearly and in acc SUBJECT T At surface SWNW 2424FNL 468F 24/2 At proposed prod. zone SWNW 2147FNL 594F	WL per SN date	uirements. BY STATE A R 74 - US B	11. Sec., T., R., M., or BI Sec 11 T13S R38	k. and Survey or Area
14. Distance in miles and direction from nearest town or BRONCO, TX IS APPROX 3.5 MILES NE O		<u></u>	12. County or Parish LEA	13. State NM
15. Distance from proposed location to nearest property of lease line, ft. (Also to nearest drig. unit line, if any)	or 16. No. of Acres in 1 266.61	Lease	17. Spacing Unit dedicate 40.00	ed to this well
<ol> <li>Distance from proposed location to nearest well, drill completed, applied for, on this lease, ft.</li> </ol>	ing, 19. Proposed Depth 9816 MD 9800 TVD	<u></u>	20. BLM/BIA Bond No. o	on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 3808 GL	22. Approximate dat	te work will start	23. Estimated duration	21312 1312 151
	24. Att	tachments	APH 201	673
<ol> <li>The following, completed in accordance with the requireme</li> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest SUPO shall be filed with the appropriate Forest Servic</li> </ol>	System Lands, the	4. Bond to cover the	on cific information and/or plans as ma 2929257	sting bond/on/file (see
25. Signature (Electronic Submission)	Name (Printed/Typed LINDA GOOD	<sup>1)</sup> Ph: 405.767.4275		Date 12/06/2004
Title AUTHORIZED REPRESENTATIVE				
Approved by (Signature) /S/ Russell E. Sorensen	Name (Printed/Typec	<sup>1)</sup> /S/ Russell E	Sorensen	APR 0 7 200
FIELD MANAGER	Office	RLSBAD FIL		
Application approval does not warrant or certify the applica operations thereon. Conditions of approval, if any, are attached.		AP	PROVAL FOR 1	YEAR
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 12 States any false, fictitious or fraudulent statements or repres	212, make it a crime for any entations as to any matter w	person knowingly and wi ithin its jurisdiction.	Ifully to make to any department or	agency of the United
Additional Operator Remarks (see next page) Electronic Subn	nission #51551 verifie	ed by the BLM Well	Information System	Ka
For C APPROVAL SUBJECT TO SENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED		TINÔ INO	na llabba "	K2

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

## Additional Operator Remarks:

Chesapeake Operating, Inc. proposed to drill a well to 9840' to test the Harris formation. If productive, casing will be run and the well will be completed. If dry, the well will be plugged and abandoned as per BLM and New Mexico Oil Conservation Division requirements.

Attached please find the Surface Use Plan, Drilling Plan, and attachments as required by Onshore Order No. 1. A general rig plat is attached as Exhibit D. A final rig plat will be submitted prior to spud once a rig is assigned.

Please be advised that Chesapeake Operating, Inc. is considered to be the operator of the above mentioned well. Chesapeake Operating, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Ferm 3160-5	UNITED STATES	
(June 1990) <sup>6</sup>	DEPARTMENT OF THE INTERIOR	
* 1	BUREAU OF LAND MANAGEMENT	FORM APPROVED Budget Bureau No. 1004-0135 Expires March 31, 1993
	SUNDRY NOTICES AND REPORTS ON WELLS	5. Lease Designation and Serial No.
Do not use this for	rm for proposals to drill or to deepen or reentry to a different reservoir.	NMNM 110843
	Use "APPLICATION FOR PERMIT-" for such proposals	6. If Indian, Allottee or Tribe Name
	SUBMIT IN TRIPLICATE	
1. Type of Well		7. If Unit or CA, Agreement Designation
	Sas Other	
2. Name of Operator		8. Well Name and No.
CHESAP	EAKE OPERATING, INC. ATTN: Linda Good 405/767-4275	YOUNG 11 FEDERAL
3. Address and Telephon	ne No.	9. API Well No.
P.O. BOX	18496, OKLAHOMA CITY, OKLAHOMA 73154 (405) 848-8000	30-025-37183
4. Location of Well (For	otage. Sec., T., R., M., or Survey Description)	10. Field and Pool, or Exploratory Area
Surface Location:	11-13S-38E SWNW 2412 FNL 417 FWL	BRONCO
BHLocation:	11-13S-38E SWNW 2147 FNL 594 FWL	11. County or Parish, State
		LEA COUNTY, NM

\_\_\_\_\_

CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE, F	REPORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACT	
Notice of Intent	Abandonment	Change of Plans
	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	Other AMENDING ORIGINAL APD	Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Surface location changed to 2412 FNL 417 FWL, SWNW. (from 2424 FNL 468 FWL, SWNW)

Enclosed are the new survey plats.

BLM Nationwide Bond #NM2634.

(CHK PN 819574)

Signed	Titlle Permitting Agent	Date February 14, 2005
(This space for Federal or State office use)	A	
Approved by /S/ Russell E. Sorensen Conditions of approval, if any:	ACTING Title_FIELD_MANAGER	Date APR 0 7 2005

CARLSCAD MALE MALE

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations to any matter within its jurisdiction.

DISTRICT I 4625 N. French Dr., Hobbs, NM 88240

State of New Mexico

Energy, Minerals, and Natural Resources Department

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

## OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

Santa Fe, New Mexico 87505

Form C-102 Revised August 15, 2000 Submit to Appropriate District Office State Lease - 4 copies Fee Lease - 3 copies

AMENDED REPORT

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

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30.025.37/83	<sup>2</sup> Pool Code 7600	Bronco, Wollcamp	
<sup>4</sup> Property Code 34549		Froperty Name	<sup>6</sup> Well Number 3
<sup>7</sup> OGRID No. 147179	CHESAP	<sup>8</sup> Operator Name <b>EAKE OPERATING</b>	<sup>9</sup> Elevation 3808'

## <sup>10</sup> Surface Location

UL or lot no.         Section         Township         Range         Lot Idn         Feet from the         North/South line         Feet from the         East/West line         County           E         11         13         SOUTH         38         EAST, N.M.P.M.         2412'         NORTH         417'         WEST         LEA										
E 11 13 SOUTH 38 EAST, N.M.P.M. 2412' NORTH 417' WEST LEA	UL or lot nò.	Section	Township	Range	Lot Idu	Feet from the	North/South line	Feet from the	East/West line	County
	E	11	13 SOUTH	38 EAST, N.M.P.M.		2412'	NORTH	417	WEST	LEA

## <sup>11</sup> 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
Е	11	13 SOUTH	38 EAST, N.M.P.M.		2147'	NORTH	594'	WEST	LEA
<sup>12</sup> Dedicated Acre	s <sup>13</sup> Jo	int or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No	0.	L	L		

### NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION







## LOCATION & ELEVATION VERIFICATION MAP



## VICINITY MAP



1307 N. HOBART PAMPA, TX. 79065 (800) 658-6382 6709 N. CLASSEN BLVD. OKLAHOMA CITY, OK. 73116 (800) 654-3219

Review this plat and notify us immediately of any possible discrepancy.

2903 N. BIG SPRING MIDLAND, TX. 79705 (800) 767-1653 Exhibit A-4

• 、





DISTRICT 1 1625 N. French Dr DISTRICT II 1301 W. Grand A. DISTRICT III 1000 Rio Brazos R DISTRICT IV 1220 S. St. Franck	enuc, d., Azt Dr., S	Artesia, NM 88 ec, NM 87410 santa Fe, NM 8 WE	210 7505 XL LOC,	, Mineral DIL CO 12 San ATION	s, and I NSER 20 Souti ta Fe, P	VATION   1 St. Franci New Mexico	ources Depar DIVISION 5 Dr.	<u>FI(</u> G)	Submit it	Appropriate D State Le Fee Le	Form C-102 gust 15, 2000 istrict Office ase = 4 copies ase = 3 copies CD REPORT
1 API	Number		Pool	Code		na e e e e e e e e e e e e e e e e e e e	in en el Transcritteren Britteren de transcritteren	<sup>3</sup> Pool	Name		
Property Code	<b>.</b>			YOU	Prop NG "1	rty Name 1" FEDE	RAL			* Well Ni	2140-1703 C
70GRID No.	V., X			CHES	Sector and the sector of the s	ator Namas B OPERA	TING			9 Eleva 380	S
				1.000 - 1.00 - 1.00		Location					
1 6 1 1 NA 120 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	tinn 11	Township 13 SOUTH	Range S8 EAST,	• • • • • • • • • • • • • • • • • • •	Lot Idn	Feet from the 2424	North South NORTH	line /	/ Peet Trues' the 468°	East/West line WEST	County
			" Botton	1 Hole Lo	cation I	l Different I	rom Surface	/			Alle Annothe and a second
- 영상 가지 않는 것이 같이 있다.	11	Township 13 SOUTH	Rang 38 EAST,		Lot Ida	Feet from the 2147	North/South line NORTH		Fect from the 594'	Rast/West line WEST	County
Dedicated Acres	12 Joi	nt or Lafill	<sup>14</sup> Consolidation	Code	<sup>15</sup> Order N	0.					
	IE W					14 American (2011) 2011 2011 2011 2011	LL INTERESI 2D BY THE D		and the second	NSOLIDATE	DORA
			3		2			Ť.M	raby cortify that the inf	CERTIFIC	As to some and
2424		X =	HL 885251. 805304 • 33.20744				NET NET	ALC: A		<u>landr</u> 5-04	<u>nan</u>
468' NAC 27 NME	ZONE	LONG _ W =	= 103.07379					7 Ju pia my	rndy certify that the c ted from field union of a writelon, and that the m 4 SEPTEM	CERTIFICA of location about on the location and the of of the section of the section BER: 17, 200	Chie plat toos e or socier ny che bast of ny
X = 8851 Y = 8050 LAT: N = 33 LONG: W = 10	25 20668						5 	1111		LYNN SEZNER IO\7920	*
	laga filman na Ting na hina na Ting na hina na							<u></u>	7. 2. BEZNE 28 # 97814 Exhilt	/ 120 NE	







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	UNITED STATE EPARTMENT OF THE I SUREAU OF LAND MANA	NTERIOR	OCD-	HOBBS	OMB NO	PPROVED . 1004-0135 ember 30, 2000
SUNDRY	NOTICES AND REPC				NMNM110843	<u></u>
abandoned we	II. Use form 3160-3 (AF	D) for such pro	posals.		6. If Indian, Allottee or	Tribe Name
SUBMIT IN TR	IPLICATE - Other instru	ctions on rever	se side.	<u></u>	7. If Unit or CA/Agree	ment, Name and/or No.
1. Type of Well □ Oil Well 🙀 Gas Well □ Of	her		<u></u>	*****	8. Well Name and No. YOUNG 11 FEDEI	RAL 3
2. Name of Operator CHESAPEAKE OPERATING	Contact:	LINDA GOOD CHKENERGY.CO	 M		9. API Well No.	
3a. Address P O BOX 18496 OKLAHOMA CITY, OK 7315	4-0496	3b. Phone No. (i Ph: 405.767.		le)	10. Field and Pool, or I BRONCO	Exploratory
4. Location of Well (Footage, Sec.,		n)	<u> </u>		11. County or Parish, a	nd State
Sec 11 T13S R38E SWNW 2	2424FNL 468FWL				LEA COUNTY, N	M
12. CHECK APP	ROPRIATE BOX(ES) T	O INDICATE N	ATURE OF	NOTICE, F	L REPORT, OR OTHER	R DATA
TYPE OF SUBMISSION			TYPE (	OF ACTION		······································
- Notice of Intent		Deeper	n	D Produc	ction (Start/Resume)	□ Water Shut-Off
□ Notice of Intent	Alter Casing	G Fractur	re Treat		nation	□ Well Integrity
Subsequent Report	Casing Repair	□ <sup>New C</sup>	Construction		nplete	Other Change to Original A
□ Final Abandonment Notice	Change Plans	D Plug a	nd Abandon		orarily Abandon	PD
	Convert to Injection	D Plug B	ack	□ <sup>Water</sup>	Disposal	
Attach the Bond under which the wo following completion of the involve testing has been completed. Final A determined that the site is ready for Attached is the Archelogical BLM Nationwide Bond #NM2	d operations. If the operation r bandonment Notices shall be f final inspection.) Survey of the access road	esults in a multiple o iled only after all rec	completion or re juirements, incl	ecompletion in a luding reclamation	a new interval, a Form 316 ion, have been completed, a	0-4 shall be filed once
(CHK PN 819574)						
14. I hereby certify that the foregoing	Electronic Submission				n System	
C	For CHESAP	EAKE OPERATIN ocessing by LIND	3 INC, sent t A ASKWIG o	o the Hobbs n 03/17/2005	(05LA0164SE)	
Name (Printed/Typed) LINDA G	OOD	<u>ت</u>	itle PERN	ITTING AGE	ENT	
Signature (Electronic	Submission)	E	Date 03/16/	/2005		
	THIS SPACE F	OR FEDERAL	OR STATE	E OFFICE L	JSE	
	l E. Sorensen	·	Acn No FI	ELD MA	NAGER	APR 0 7 200
Conditions of approval, if any, are attach certify that the applicant holds legal or ex which would entitle the applicant to cond	uitable title to those rights in the luct operations thereon.	he subject lease	Office		AD FIELD OFF	
Title 18 U.S.C. Section 1001 and Title 4. States any false, fictitious or fraudulent	3 U.S.C. Section 1212, make it statements or representations a	a crime for any pers as to any matter with	on knowingly a in its jurisdiction	and willfully to : on.	make to any department or	agency of the United

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1. (For BLM Use) BLM Report No.	2. (For BLM Use) Reviewer's Initials/	Date		3. NMCRIS Num	ber: 92113
	Accepted ( ) Re	jacted ( )			
4. Type of Report:	Negative (X)	P	ositive ( )		
5. Title of Report: A Class III Cultu Young 11 Federal No. 3 Well	ral Resource Survey fr	or an Access Road	to the 6. I	Fieldwork Date(s):	March 10, 2005
Author(s): Justin Rein			7.	Report Date: March	11, 2005
8. Consultant Name/Address: Boo	Ine Archaeological Ser	rvices, LLC	•	Cultural Spacurce i	Permit No.; 190-2920-03-E
Direct Charge: Danny Boone			Willian Isovarve ;	diline inder the mand an -	
Field Personnel Names: Justin Rei	n				
Address: 2030 North Canal Carlsbad, New Mexico 88220					t No.: BAS-02-05-43
Phone (505) 885-1352					
11. Customer Name: Chesapeake	Operating Inc.		12. Custom	er Project No.:	
Responsible Individual: Linda Goo	d				
Address: PO Box 18496 Oklahoma City, OK 73154	-0496				
Phone: (405) 767-4275					and a second
13. Land Status	BLM	State	Private	Other	Total
a. Area Surveyed (acres)	6.44		-		6.44
b. Area of Effect (acres)	3.22				3.22
14. Linear Lengt	.h <u>2,805 ft</u> V	Width <u>100 ft</u>			
15. Location (Map[s] Attached):					
a. State: New Mexico					
b. County: Les County					
c. BLM Office: Carlsbad Field Offic	2				
d. Nearest City or Town: Tatum, N	lew Mexico				
e. Legal Description: T 13 S, R 38	E, Section 10: E% NE	174 NWV4 (irregular sec	tion, template :	anchored in the south	hwest comer)
f. Well Pad Footages: N/A					-
g. USGS 7.5' Map Name(s), Date(s	i), and Code(s): Prairi	ieview NE, New Me	axico / Texas 1	970 Photorevised 19	161 (32103-B1)

#### 16. Project Data:

â.	Records Search:	Date(s) of BLM File Review: March 9, 2005 Name of Reviewer(s): Justin Rein	
		Date(s) of ARMS Data Review March 9, 2005 Name of Reviewer(s); Justin Rein	

Findings (see Field Office requirements to determine area to be reviewed during records search): No previously recorded sites were found within one mile of the survey area.

b. Description of Undertaking: Chesapeake Operating Inc. plans to construct an access road to the Young 11 Federal No. 3 well location. Linda Good, with Chesapeake Operating, requested the survey and provided plats. The project can be found in Township 13 South, Range 38 East, Section 11. The proposed access road begins at the northwest corner of the well location and travels 610 ft west, then 2,195 ft north to an existing lease road. The well location was initially surveyed in November 2004 (BAS project No. 11-04-20, BLM project No. 05-162, NMCRIS project No. 90884). In all, 6.44 acres was surveyed on private property with federal mineral rights under the jurisdiction of the BLM-CFO.

c. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.): The project area is located on a flat plain roughly 15 miles east of Tatum, New Mexico, just west of the New Mexico / Texas border. The proposed access road follows the margins of cultivated farmland. The elevation averages 3,807 feet above mean sea level. Overall, the terrain slopes gradually downhill towards the southeast at a grade of less than one percent. Soils are of the Brownfield-Patricia-Tivuli association as defined by the Soil Conservation Service of the U.S. Department of Agriculture. These reddish sandy soils have been plowed into parallel rows running north to south. Local vegetation, aside from planted cotton, are dominated by grasses and occasional caci. Due to the vegetative ground cover, surface visibility averaged 85 percent at the time of survey.

Climatic data was obtained for the nearby town of Tatum, New Mexico from the Western Regional Climate Center online database. From 1919 to 2004, Tatum received an average annual precipitation of 16.01 inches. During the same time, Tatum had an average high temperature of 74.7 degrees Fahrenheit and an average low temperature of 42.1 degrees Fahrenheit. January was the coldest month averaging 55.4 degrees Fahrenheit, while July was the warmest on average at 92.6 degrees Fahrenheit.

d. Field Methods (transect intervals; crew size; time in field; etc.): A crew of one spent one hour surveying the project area. A 15 m transect interval was used.

e. Artifacts Collected?: None

- 17. Cultural Resource Findings: No cultural materials were encountered.
  - a. Location/Identification of Each Resource: N/A
  - b. Evaluation of Significance of Each Resource: N/A

18. Management Summary (Recommendations): No cultural materials were encountered during the survey. As such, archaeological clearance is recommended for the access road to the Young 11 Fed No. 3 well. If any cultural materials are encountered during construction, work at that location should cease and archaeologists with the BLM-CFO should be notified immediately.

19.

I certify the information provided above is correct and accurate and meets all applicable BLM standards.

Responsible Archaeologist \_\_\_\_\_\_ 31/0 Signature Date



# Survey for an Access Road to the Young "11" Federal No. 3 Well Location



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BUNDRY Do not use this abandoned wel	UNITED STATES PARTMENT OF THE INT UREAU OF LAND MANAGE NOTICES AND REPORT is form for proposals to dri II. Use form 3160-3 (APD)	MENT S ON WELLS ill or to re-enter an for such proposals.	OMB Expires: N 5. Lease Serial No. NMNM110843 6. If Indian, Allottee	
SUBMIT IN TRI	PLICATE - Other instructio	ons on reverse side.	7. If Unit or CA/Ag	reement, Name and/or No.
1. Type of Well Oil Well 🛛 Gas Well 🗖 Oth			8. Well Name and N YOUNG 11 FEI	
2. Name of Operator CHESAPEAKE OPERATING	Contact: LIN	NDA GOOD Mail: Igood@chkenergy.com	9. APT Well No. 30-025	27182
3a. Address P O BOX 18496 OKLAHOMA CTIY, OK 73154	P	<ul> <li>b. Phone No. (include area code ph: 405.767.4275</li> <li>x: 405.879.9583</li> </ul>		
4. Location of Well <i>(Footage, Sec., T</i> Sec 11 T13S R38E SWNW 24			11. County or Paris LEA COUNTY	
12. CHECK APPE	OPRIATE BOX(ES) TO D	NDICATE NATURE OF	NOTICE, REPORT, OR OTH	ER DATA
TYPE OF SUBMISSION			DF ACTION	
Attach the Bond under which the wor following completion of the involved testing has been completed. Final At determined that the site is ready for final The surface owner has reques A Closed system will be utilized	ally or recomplete horizontally, giv rk will be performed or provide the loperations. If the operation result bandonment Notices shall be filed of inal inspection.) sted that Chesapeake Opera ed consisting of above groun	e subsurface locations and meas Bond No. on file with BLM/BI s in a multiple completion or re- only after all requirements, inclu ating, Inc. use a Closed S	sured and true vertical depths of all per A. Required subsequent reports shall completion in a new interval, a Form 3 iding reclamation, have been complete ystem.	tinent markers and zones. be filed within 30 days 160-4 shall be filed once
hauled to an authorized dispo Chesapeake Nationwide Bond				
(CHK PN 819574)				
14. Thereby certify that the foregoing is	Electronic Submission #52 For CHESAPEAK nmitted to AFMSS for process	E OPERATING INC, sent to sing by ARMANDO LOPEZ	o the Hobbs	<u></u>
Name (Printed/Typed) LINDA GC				
Name (Printed/Typed)       LINDA GC         Signature       (Electronic S	Submission)	Date 12/28/2	2004	
		FEDERAL OR STATE		
Signature (Electronic S		FEDERAL OR STATE		ARR 0 7 20

\*\* BLM REVISED \*\*







Exhibit <u>b</u>

Chesapeake Operating, Inc							
	Ger	neral Rig Layout					
SIZE	FSCM NO	DWG NO	REV				
SCALE	Not to Scale	SHEET 1 OF 1	I				

÷

			*		RECEIVE
					NOV 2 4 2004
1. (For BLM Use) BLM Report No.		2. (For BLM Use) Reviewer's Initials/Date			13Y: 99
	Accepted (	Accepted ( ) Rejected ( )			
4. Type of Report	Negative ( X		Positive (	)	
5. Title of Report: A Class III C No. 3 Well Pad	ultural Resource Survi	ey for the Young	11 Federal	8. Fieldwork Date	(s): November 22, 2004
Author(s): Justin Rein				7. Report Date: N	ovember 23, 2004
. Consultant Name/Address:	Boone Archaeological	Services, LLC		Cuthirs Data	rce Permit No.: 190-2920-03-E
Direct Charge: Danny Boone				. vocual resou	NE FERRIL 10. 120-2920-03-E
Field Personnel Names: Justin	Rein		Ļ		
Address: 2030 North Canal Carlsbad, New Mexico	88220		. 1	10. Consultant Re	port No.: BAS-11-04-20
Phone (505) 885-1352					
1. Customer Name: Chesape	ske Operating Inc.		12 Custo	mer Project No.:	
Responsible (ndividual: Linda (	Good		172 C 2000	and i thight life?	
Address: PO Box 18496 Oklahoma City, OK 73	154-0496				
Phone: (405) 767-4275		••••••••			
3. Land Status	BLM	State	Private	Other	Total
L Area Surveyed (acres)	8.26				8.26
Area of Effect (acres)	3.67				3.67
14: Block Lei	igth 600 ft	Width <u>600</u>	<u>ħ</u>		
15: Location (Map(s) Attached	):		-		
a. State: New Mexico					
2. County: Lea County					
BLM Office: Carlsbad Field C	)ffice				
I. Nearest City or Town: Tatun	New Mexico				
Legal Description: T 13 S, R	38 E, Section 11: SW	% NW%, NW% S	W%		
Well Pad Footages: The You	ng 11 Fed No. 3 is cen	tered 2,424 feel 1	forn the north line	and 466 feet from	the west line of Section 11,
a. USGS 7.5' Máp Name(s), Da	te(5), and Code(s): P	alrieview NE, Ne	w Mexico / Texas	1970 Photoreviser	d 1981 (32103-B1)
16. Project Data:				<u>us (</u>	
a. Records Search: Date	s) of BLM File Review	v: November 22,	2004 Name of I	Reviewer(s): Dann	y Boone
Date( Findings (see Field Office r were found within one mile o	s) of ARMS Data Rev equirements to deter	iew November 22	2004 Name o	Reviewer(s) Dar	in Room

CPC - CPC -



b. Description of Undertaking: Chesapeake Operating Inc. plans to construct the Young 11 Federal No. 3 well pad, Linda Good, with Chesapeake Operating, requested the survey and provided plats. The project can be found in Township 13 South, Range 38 East, Section 11. The proposed well is centered 2,424 feet from the north line and 455 feet from the west line of Section 11. A 500 ft by 600 ft block was surveyed around the well center to ensure protection of cultural resources. An existing access road leads to the proposed location. In all, 8.26 acres was surveyed on private property with federal mineral rights administered by the BLM-CFO.

c. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.): The project area is located on a flat plain roughly 15 miles east of Tatum, New Mexico, just west of the New Mexico / Texas border. The elevation averages 3,807 feet above mean sea level. The terrain slopes gradually downhill towards the southeast at a grade of less than one percent. Local soils are of the Brownfield-Patrica-Tivuli association as defined by the Soil Conservation Service of the U.S. Department of Agriculture. These deep sandy soils undulate gently across the flat plain. Local vegetative ground cover, surface visibility averaged 85 percent at the time of survey. The surrounding area has been impacted primarily my agricultural activities. The nonheastem portion of the survey area is occupied by the southwestern corner of a circular imgated field. The entire project area has been mechanically tilled.

Climatic data was obtained for the nearby town of Tatum, New Mexico from the Western Regional Climate Center online database. From 1919 to 2004, Tatum received an average annual precipitation of 16.01 inches. During the same time, Tatum had an average high temperature of 74.7 degrees Fahrenheit and an average low temperature of 42.1 degrees Fahrenheit. January was the coldest month averaging 55.4 degrees Fahrenheit, while July was the warmest on average at 92.6 degrees Fahrenheit.

d. Field Methods (transect intervals; crew size; time in field; etc.): A crew of one spent 1.5 hours surveying the project area. A 15 m transect interval was used.

e. Artifacts Collected?: None

19

17. Cultural Resource Findings: No cultural materials were encountered.

a. Location/Identification of Each Resource: N/A.

b. Evaluation of Significance of Each Resource: N/A

18. Management Summary (Recommendations): No cultural materials were encountered during the survey. As such, archaeological clearance is recommended for the proposed Young 11 Fed No. 3 well. If any cultural materials are encountered during construction, work at that location should cease and archaeologists with the SLM-CFO should be notified immediately.

I certify the Information provided above is correct and accurate and meets all applicable BLM standards.

Responsible Archaeologist 11.23.04 Signature



Survey for the Young 11 Federal No. 3 Well Pad

BAS11-04-20

DRILLING PROGRAM

ONSHORE ORDER NO. 1 Chesapeake Operating, Inc. Young 11 Federal 3 SHL: 2424 FNL 468 FWL, SW NW of Section 11-13S-38E BHL: 2147 FNL 594 FWL, SW NW of Section 11-13S-38E Lea County, New Mexico

Page 1

## ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal and Indian Oil and Gas Leases

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (CFR 43, Part 3160) and the approved Application for Permit to Drill. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling and completion operations.

Approval of this application 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.

### 1. FORMATION TOPS

Formation	Depth	Subsea
Rustler	2283	1547
Yates	3109	721
Seven Rivers	3363	467
Grayburg	4278	-448
San Andres	4543	-713
Glorieta	5995	-2165
Clearfork Upper	6633	-2803
Tubb	7237	-3407
Clearfork Lower	7352	-3522
Abo Shale	7927	-4097
*Burrus Pay	9090	-5260
Wolfcamp Lime	9164	-5334
XX Marker	9350	-5520
*Harris Pay	9533	-5703
ТD	9800	
*Potentially productive zones		

The estimated tops of important geologic markers are as follows:

## 2. <u>ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING</u> <u>FORMATIONS</u>

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

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DRILLING PROGRAM

Page 2

<b>Substance</b>	<b>Formation</b>	<u>Depth</u>
Oil/Gas	Burrus Pay	9090 - 9164
Oil/Gas	Wolfcamp "Harris Pay"	9533 - 9600

All shows of fresh water and minerals will be reported and protected.

## 3. BOP EQUIPMENT: 5,000# System

Chesapeake Operating, Inc.'s minimum specifications for pressure control equipment are as follows:

- I. BOP, Annular, Choke Manifold, Pressure Test See Exhibit F-1 and F-2.
  - A. Equipment
    - 1. The equipment to be tested includes all of the following that is installed on the well:
      - (a) Ram-type and annular preventers,
      - (b) Choke manifolds and valves,
      - (c) Kill lines and valves, and
      - (d) Upper and lower kelly cock valves, inside BOP's and safety valves.
  - B. Test Frequency
    - 1. All tests should be performed with clear water,
      - (a) when installed,
      - (b) before drilling out each casing string,
      - (c) at any time that there is a repair requiring a pressure seal to be broken in the assembly, and
      - (d) at least once every 30 days while drilling.
  - C. Test Pressure
    - 1. In some drilling operations, the pressures to be used for low and high-pressure testing of preventers and casing may be different from those given below due to governmental regulations, or approved local practices.
    - 2. If an individual component does not test at the low pressure, **do not**, test to the high pressure and then drop back down to the low pressure.
    - 3. All valves located downstream of a valve being tested must be placed in the open position.
    - 4. All equipment will be tested with an initial "low pressure" test at 250 psi.
    - 5. The subsequent "high pressure" test will be conducted at the rated working pressure of the equipment for all equipment except the annular preventer.
    - 6. The "high pressure" test for the annular preventer will be conducted at 70% of the rated working pressure.
    - 7. A record of all pressures will be made on a pressure-recording chart.

**DRILLING PROGRAM** 

Page 3

D. Test Duration

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- 1. In each case, the individual components should be monitored for leaks for <u>5</u> <u>minutes</u>, with no observable pressure decline, once the test pressure as been applied.
- II. Accumulator Performance Test
  - A. Scope
    - 1. The purpose of this test is to check the capabilities of the BOP control systems, and to detect deficiencies in the hydraulic oil volume and recharge time.
  - B. Test Frequency
    - 1. The accumulator is to be tested each time the BOP's are tested, or any time a major repair is performed.
  - C. Minimum Requirements
    - 1. The accumulator should be of sufficient volume to supply 1.5 times the volume to close and hold all BOP equipment in sequence, <u>without recharging</u> and the <u>pump turned off</u>, and have remaining pressures of <u>200 PSI above the</u> <u>precharge pressure</u>.
    - 2. Minimum precharge pressures for the various accumulator systems per **manufacturers recommended specifications** are as follows:
    - 3.

System Operating PressuresPrecharge Pressure1500 PSI750 PSI2000 PSI1,000 PSI3000 PSI1,000 PSI

- 3. Closing times for the Hydril should be less than <u>20 seconds</u>, and for the ramtype preventers less than <u>10 seconds</u>.
- 4. System Recharge time should not exceed **10 minutes**.

## D. Test Procedure

- 1. Shut accumulator pumps off and record accumulator pressure.
- 2. In sequence, close the annular and one set of properly sized pipe rams, and open the HCR valve.

CONFIDENTIAL – TIGHT HOLE Lease Contract No. NMNM 11843

**DRILLING PROGRAM** 

Page 4

- 3. Record time to close or open each element and the remaining accumulator pressure after each operation.
- Record the remaining accumulator pressure at the end of the test sequence. Per the previous requirement, this pressure <u>should not be less</u> than the following pressures:

System Pressure	Remaining Pressure At Conclusion of
	Test
1,500 PSI	950 PSI
2,000 PSI	1,200 PSI
3,000 PSI	1,200 PSI

- 5. Turn the accumulator pumps on and record the recharge time. This time should not exceed **10 minutes.**
- 6. Open annular and ram-type preventers. Close HCR valve.
- 7. Place all 4-way control valves in <u>full open</u> or <u>full closed</u> position. <u>Do not</u> <u>leave in neutral position</u>.

## 4. CASING AND CEMENTING PROGRAM

a. The proposed casing program will be as follows:

<u>Purpose</u>	Interval	Hole Size	<u>Casing</u> <u>Size</u>	<u>Weight</u>	<u>Grade</u>	Thread	Condition
Surface	0-430'	17-1/2"	13-3/8"	48#	H40	STC	New
Intermediate	430'-4500'	11"	8-5/8"	32#	J55	STC	New
Production	4500' - 9,815'	7-7/8"	5-1/2"	17#	L80	LTC	New

- b. Casing design subject to revision based on geologic conditions encountered.
- c. The cementing program will be as follows:

Interval	Туре	Amount	Yield	Washout	Excess
Surface	35:65 Poz:C (Lead)	155 sx	2.07	20%	100%
	Class C (Tail)	235 sx	1.34		100%
Intermediate	50:50 Poz:C (Lead)	1000 sx	2.48	20%	75%
	Class C (Tail)	150 sx	1.32		50%
Production	50:50 Poz:H (Lead)	380 sx	2.5	10%	25%
	50:50 Poz:H (Tail)	295 sx	1.35	1	25%

**DRILLING PROGRAM** 

Page 5

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## 5. MUD PROGRAM

a. The proposed circulating mediums to be used in drilling are as follows:

Interval	Mud Type	Mud Weight	Viscosity	Fluid Loss
Surface	Native/Spud Mud	8.6 – 9	29-38	NC
Intermediate	Brine	9.2 - 10	29-32	NC
Production	FW-Cut Brine	8.4 – 9	29-34	NC-12

An in ground reserve pit will be used to handle all drilling fluids, this pit design is based on the current (OCD guidelines for reserve pits). This will consist of two parallel pits approximately 150' in length X 15" in width X 12' deep. The pits will be lined with <u>12 mil</u> woven plastic liner. The closing procedure will follow Guidelines set forth on page 14 Item B #3 in "The Pit and Below Grade Tank Guidelines" dated Nov. 1, 2004. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-tolet and then hauled to an approved sanitary landfill..

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

## 6. TESTING, LOGGING AND CORING

The anticipated type and amount of testing, logging and coring are as follows:

- a. Drill stem tests are not planned.
- b. The logging program will consist of Natural GR, Density-Neutron, PE & Dual Laterolog from TD to surface casing; Neutron-GR surface casing to surface.
- c. Cores samples are not planned.

## 7. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

- a. The estimated bottom hole pressure is 3300 psi. No abnormal pressures or temperatures are anticipated.
- b. Hydrogen sulfide gas is not anticipated.

## 8. DIRECTIONAL INFORMATION

This well is being directionally drilled. A direction well plan is included for your review. See Exhibit G-1 to G-2.



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 $(x_1,y_2,\dots,y_{n-1}) \in \mathbb{R}^{n-1}$ 

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Exhibit F-2

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REDDC THE DIRECTION DE DRILLING COMPANY	Job Number: Company: Chesapeake Operating, inc. Lease/Well: Young 11 Federal #3 Location: Lea County Rig Name: RKB: G.L. or.M.S.L.:	State/Country: New Mexico Declination: Grid: File name: C:\PROPDS-1\CHESAP-1\YOUNG1-3\YOUN11-3.SVY Date/Time: 29-Nov-04 / 17:14 Curve Name: Plan 1

4

## THE DIRECTIONAL DRILLING COMPANY

WINSERVE SURVEY CALCULATIONS Minimum Curvature Method Vertical Section Plane 23.79 Vertical Section Referenced to Wellheed Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	inci Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S. FT	E-W FT	Dogleg Severity Deg/100
KOP, Build	1.5%100*	and the second					
6700.00	,00,	23.79	6700.00	.00	.00	.00	.00
6800.00	1.50	23.79	6799.99	1.31	1.20	_53	1.50
6900.00	3.00	23.79	6899,91	5.23	4,79	2.11	1.50
7000.00	4.50	23.79	6999,69	11.77	10.77	4.75	1.50
End of Build	1					and the second	
7100.18	6.00	23.79	7099.45	20.94	19.16	8.45	1.50
7200.18	6.00	23.79	7198.90	31,40	28.73	12.67	.00
7300.18	6.00	23.79	7298.35	41.86	38.30	16.89	.00
7400.18	6.00	23.79	7397.80	52.32	47.87	21.10	.00
7500.18	6.00	23.79	7497.25	62,77	57.44	25.32	.00
7600.18	6.00	23.79	7596.70	73.23	67.01	29.54	.00
7700.18	6.00	23.79	7696.16	83.69	76.58	33.76	.00
7800.18	6.00	23.79	7795,61	94.15	86.15	37.98	.00
7900.18	6.00	23.79	7895.06	104.60	95.71	42.20	.00
8000.18	6.00	23.79	7994.51	115.06	105.28	46.42	.00
8100.18	6.00	23.79	8093.96	125.52	114.85	50.63	.00
8200.18	6.00	23.79	8193.41	135,98	124.42	54.85	.00
8300.18	6.00	23.79	8292.87	146.43	133.99	59.07	.00.
8400.18	6.00	23.79	8392.32	156.89	143.56	63.29	.00
8500.18	6.00	23.79	8491.77	167.35	153.13	67.51	.00
Interpolated	l Point						
8508.45	6.00	23.79	8500.00	168.21	153.92	67.86	.00

Exhibit <u>G-1</u>

Measured Depth FT	Inci Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	Dogleg Severity Deg/100
8600.18	6.00	23.79	8591.22	177.81	162.70	1	·····
8700.18	6.00	23.79	8690.67	188.26	172.27	71.73	.00
8800.18	6.00	23.79	8790.12	198.72		75.94	.00
8900,18	6.00	23.79	8889.58	209.18	181.83	80.16	.00
9000.18	6.00	23.79	8989.03		191.40	84.38	.00
and the second		and an a state of	0005.03	219.64	200.97	88.60	.00
9100.18	6.00	23.79	9088,48	230.09		- +	
9200.18	6.00	23.79	9187.93		210.54	92.82	.00.
9300.18	6.00	23.79		240.55	220.11	97.04	.00
9400.18	6.00	23.79	9287.38	251.01	229.68	101.26	.00
9500.18	6.00		9386.83	261.47	239.25	105.47	.00
0000.10	0.00	23.79	9486.29	271.92	248.82	109.69	.00
9600.18	6.00	23.79	9585.74				
9700.18	6.00	23.79		282.38	258.38	113.91	.00
9800.18	6.00	23.79	9685.19	292.84	267.95	118.13	.00
Proposed B		23.18	9784.64	303,29	277.52	122:35	.00
Lunhosed D							
9815.62	6.00	23.79	9800.00	304.91	279.00	123.00	.00

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°-- Plan 1

## VERTICAL SECTION (Ft) @ 23.79°

**CONFIDENTIAL – TIGHT HOLE** 

Lease No. NMNM 110843

SURFACE USE PLAN Page 1

## ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal and Indian Oil and Gas Leases

## 1. EXISTING ROADS

- a. Existing county roads will be used to enter proposed access road.
- b. Location, access, and vicinity plats attached hereto. See Exhibits A-1 through A-4.

## 2. PLANNED ACCESS ROADS

- a. A new access road 50' in length and 14' in travel way width with a maximum disturbance area of 30' will be built in accordance with guidelines set forth in the BLM Onshore Orders.
- b. No turnouts are expected.
- c. In order to level the location, cut and fill will be required. Please see attached Well Location and Acreage Dedication Plat Exhibit A1-A4.
- d. A locking gate will be installed at the site entrance.
- e. Any fences cut will be repaired. Cattle guards will be installed, if needed.
- f. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.
- g. Driving directions are from Hwy Int of Hwy 380 and Hwy 769, go south 3.0 miles, thence West 0.5 miles to a point <u>+</u>100 North of the location.
- 3. <u>LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS OF THE</u> <u>PROPOSED LOCATION</u> – see Exhibit B.

## 4. LOCATION OF PRODUCTION FACILITIES

It is anticipated that production facilities will be located on the well pad as product will be sold at the wellhead and/or tank battery. It is anticipated to hook to the Duke or Phillips Pipeline which runs on the north end of the well pad. – See Exhibit C

## 5. LOCATION AND TYPE OF WATER SUPPLY

Water will be obtained from a private water source. Chesapeake Operating, Inc. will ensure all proper notifications and filings are made with the state.

**CONFIDENTIAL – TIGHT HOLE** 

Lease No. NMNM 110843

#### SURFACE USE PLAN Page 2

### 6. CONSTRUCTION MATERIALS

No construction materials will be used from Section 4-20S-33E. All material (i.e. shale) will be acquired from private or commercial sources.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

An in ground reserve pit will be used to handle all drilling fluids, this pit design is based on the current (OCD guidelines for reserve pits). This will consist of two parallel pits approximately 150' in length X 15" in width X 12' deep. The pits will be lined with 12 mil woven plastic liner. The closing procedure will follow Guidelines set forth on page 14 Item B #3 in "The Pit and Below Grade Tank Guidelines" dated Nov. 1, 2004. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-tolet and then hauled to an approved sanitary landfill.

### 8. ANCILLARY FACILITIES

None

### 9. WELLSITE LAYOUT

The proposed site layout plat is attached showing a generic rig plat with rig orientation and equipment location. See Exhibit D.

### 10. PLANS FOR RECLAMATION OF THE SURFACE

The location will be restored to as near as original condition as possible. Reclamation of the surface shall be done in strict compliance with the existing New Mexico Oil Conservation Division regulations.

Backfilling leveling, and contouring are planned as soon as the drilling rig and steel tanks are removed. Wastes and spoils materials will be buried immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible. The rehabilitation will begin after the drilling rig is removed.

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**CONFIDENTIAL -- TIGHT HOLE** 

Lease No. NMNM 110843

SURFACE USE PLAN Page 3

11. <u>SURFACE OWNERSHIP</u> Choya Young 806-Route 1, Box 35 Plains, TX 79355

806-592-1986

MINERAL OWNERSHIP: United States of America Department of Interior Bureau of Land Management

12. ADDITIONAL INFORMATION

A Class III cultural resource inventory report was prepared by Boone Archaeological Services, Carlsbad, New Mexico for the proposed location. A copy of the report has been sent to the BLM office under separate cover and is also attached for reference. See Exhibit E.

### 13. OPERATOR'S REPRESENTATIVES

Drilling and Completion Operations Rob Jones District Manager P.O. Box 18496 Oklahoma City, OK 73154 (405) 810-2694 (OFFICE) (405) 879-9573 (FAX) riones@chkenergy.com

### **Field Representative**

Mike Whitefield 550 West Texas Ave. Midland, TX 79701 432-683-7443 (OFFICE) 432-685-4399 (FAX) mwhitefield@chkenergy.co

## **Regulatory Compliance**

Linda Good Permitting Agent P.O. Box 11050 Oklahoma City, OK 73154 (405) 767-4275 (OFFICE) (405) 879-9583 (FAX) Igood@chkenergy.com

### Drilling Engineer

David DeLaO P.O. Box 18496 Oklahoma City, OK 73154 (405) 767-4339 (OFFICE) (405) 879-9573 (FAX) (405) 990-8182 (MOBILE) ddelao@chkenergy.com

### Asset Manager

Andrew McCalmont P.O. Box 18496 Oklahoma City, OK 73154-0496 405-879-7852 (OFFICE) 405-879-7930 (FAX) amccalmont@chkenergy.com

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Lease No. NMNM 11843

SURFACE USE PLAN Page 4

#### 14. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this surface use plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed will be performed by operator (including contractors and subcontractors) submitting the APD, in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

1. Mark Center 12/3/04 By:

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Date: