Form 3160-4 (August 1999)

## UNITED STATES DEPARTMENT OF THE INTERIOR

FOR	M APPROVED
OME	NO. 1004-0137
Expires:	November 30, 2000

		·				LAND M									E	OMB No expires: No	0. 10 vemi	04-0137 per 30, 2000
WELL COMPLETION OR RECOMPLETION REPORT AND LOG												Expires: November 30, 2000  5. Lease Serial No.						
												NMNM022584						
1a. Type of Well Oil Well og Gas Well Dry Other												6. If Indian, Allottee or Tribe Name						
b. Type of Completion: New Well Work Over Deepen Plug Back Diff. Resvr,.												L						
Other													7. Uni	t or CA Ag	reem	ent Name and No.		
2. Name	e of Operat	or											·					
	2. Name of Operator Chesapeake Operating, Inc.													8. Lease Name and Well No.				
3. Address P. O Box 18496   3a. Phone No. (include area code)													Chaves A Federal 6  9. API Well No.					
Oklahoma City, OK 73154-0496 (405)848-8000																		
													30-005-63571  10. Field and Pool, or Exploratory					
4. Location of Well (Report location clearly and in accordance with Federal requirements)*  At surface SW NE 1980' FNL & 980' FEL												'   '				. ,		
At surface SW NE 1980 FNL & 980 FEL DEC 1 8 2003												1	Pecos Slope; Abo 11. Sec., T., R., M., on Block and					
At to	p prod. inte	rval repo	orted be	elow	Same	e				(	)\r	) A (	RTES		Survey or Area 21-7S-26E			
					Com	_				•		J-74F	7165	IA 1	2. Cou	nty or Paris	sh	13. State
	tal depth				Same										Chav	es		. NM
14. Date	Spudded		- {	15. Dat	e T.D. Reac	hed		13	16. Date C					1	17. Elevations (DF, RKB, RT, GL)*			
09	/02/03	3	- [	09	/13/03			.	u v	& A		/24			GL: 3716'			
18. Total	Denth:	MD 4	4500	1	19. F	lug Back T.I	D.:	MD 4	4351				h Bridge	Plug Se	t: M	<u> </u>		
*		ΓVD ,	4500	•	1 .		•	TVD				Dop.	Dilugo	i iug oc	T	VD NA		
21. Туре	Electric &	Other M	echanie	cal Logs	s Run (Subn	nit copy of ea	ich)				22.	Was	well con	ed? 🔯	No [	Yes (St	ıbmit	analysis)
		_			aterol						l	Was	DST run	? 👿	No [	Yes (Sul	bmit :	report)
					eutron			<del>-</del>			<u> </u>	Dire	ctional S	urvey?	TX N	Yes	s (Sul	omit copy)
23. Casin	ig and Line	r Record	(Керо	rt all str	rings set in v	vell)		Stage	Cementer	No	of Sks	g,		17.1			г	
Hole Size	Size/G	rade V	Vt. (#/f	t.)   1	Top (MD)	Bottom (N	(D)		epth	Type			Slurry (BE		Ceme	nt Top*		Amount Pulled
12-1/	4 8-	1/8	24#	10		715'			•	300	l.i t	e			Sur	f		<del></del>
_12_1/	/4 8-5/8 24# 0 715' 300 Lite   J-55   200 C1 C									Juli								
7-7/8		/2	11.6	# 0	<del></del>	4.49	2			275					3342'			<del></del>
	.I-'									-	<u></u>	•					$\vdash$	
																		<del></del>
	<u> </u>					l												
24. Tubin		0.01	- In	-1 - B	-4 (40)	C:		D-at	C. (A(D)	D -1 -		(2.47)	<del></del>		<del></del>			
Size	_ <del></del>	h Set (MI 219 '	D)   Pa		epth (MD)	Size		Depth	Set (MD)	Packer	Depth	(MD)	S S	ize	Dep	th Set (MD	)   [	acker Depth (MD)
$\frac{2-3/8}{25.$ Produ				NA				26.	Perforation	Record			ــــــــــــــــــــــــــــــــــــــ					
	Formatio			ī	Гор	Bottom			erforated I				Size	No. I	loles		Perf	. Status
A) Abo	B			4026		4095	7		-97°						of 22 Open			. Status
B) Abo				4224		4299		4224-98			0.42						l	
C)								80°	phasi	ng 2	3 g	ram	chg					
D) _																		· · · · · · · · · · · · · · · · · · ·
27. Acid,	<del></del>		, Ceme	ent Sque	eeze, Etc.	· ·												
	Depth Inter									nount a					<del></del>			
422	4-98																	.s 30 w/
402	26 <b>-</b> 97 <b>'</b>					Brady												
402	.0-37					gal 15 40 Brow			Irac	<u>q/63</u>	,00	u ga	T 03	2 CU2	. Ioa	mea Aq	uav	18 30
28. Produ	ction - Inte		W/	0,09	101F ZUZ	4U_BEOW	11 5	and										
Date First Produced	Test	Hours	Tes	t duction	Oil BBL	Gas MCF	Wat	er	Oil Gravi		Ga		Pro	duction N	<b>1ethod</b>		_	·
11/24/0	Date 31/27/03	Tested 2	1	duction	0	308	0		Corr. API		Gr	avity		f 1c	wing			
Choke	7 P	Csa	24 1	Hr.	Oil	Gas	Wat		Gas : Oil		We	II Statu	ıs					
Size	Flwg.	Press.	Rat	•	BBL	MCF	BBI		Ratio		1.	ъ	1 .					
17/64	Si IU	160			0	308	<u> </u>	0	NA		نــــــــــــــــــــــــــــــــــــــ	Proc	lucing	3				
28a. Produ	Ction - Inte	Hours	Tes		Oit	Gas	Wate	er	Oil Gravi	lv	Ga		<del>1-</del> -	4		-		
Produced	Date	Tested		duction	BBL	MCF	BBL		Corr. API			s avity	Pro	duction N	tethod			
			1-	<del>&gt;</del>	<u> </u>	<u> </u>	L		<del></del>		$\perp$							
Choke Size	Tog. Press. Flug.	Csg. Press.	24 I Rate		Oil BBL	Gas MCF	Wate BBL		Gas : Oil Ratio		We	II Statu	S					
	SI		1-	<b>→</b>														
(See instru-	ctions and	spaces fo	r addi	tional d	ata on rever	se side)								<del></del>				

	tion - Inter	Hours	Test	Oil	Gas	Water	Oil Gravity	Gas	Production Method				
ate First oduced	Date	Tested	Production	BBL	MCF	BBL	Corr. API	Gravity	71000ction (nemoc				
hoke ize	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status					
Sc. Produc	tion - Inter												
ate First roduced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method				
hoke Size	Tog. Press. Flwg. Si	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	·				
		s (Sold, use	ed for fuel, v	vented, etc.)	-		· · · · · · · · · · · · · · · · · · ·						
		us Zones (	Include Aqu	uiferș):				31. Format	ion (Log) Markers				
tests, i	all importa ncluding de coveries.	nt zones o epth interv	of porosity a al tested, cu	and content shion used,	s thereof: time tool o	Cored intervipen, flowing	als and all drill-sto and shut-in pressu	em res	ج				
										Тор			
Forma	ition	Тор	Bottom		Desci	riptions, Cont	tents, etc.		Name	Meas. Depth			
Abo		4076	4095	G	as			San An	dres	670			
Abo	Į	4224	4228	G	as			Glorie	tta	1810			
Abo	1	4277	4299	G	as			Tubb		3241			
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32. Addin	onal remar	ks (include	plugging p	mcedure):									
		(	Processing P	iocoduloj.									
Fr Date	***		•										
All best													
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	enclosed at		-				* .	•					
			gs (1 fuli se			Geologic Rep		•	Directional Survey				
3. Sui	nary Notice	e for plugg	ing and cen	ient verifica	ation 6.	Core Analysi	s 7. Other	er.					
34. I herel	ov certify ()	at the fore	going and a	ttached info	rmation is	complete and	Loorest as determi	ined from all avai	lable records (see attached in	structions)*			
	,	1016	Pour and a	wacned fill	manuli 15	complete and	CONTECT AS GEIGHIN	med Hom all avai	innia teening free mimonia in	· · ·			
Name	(please pri	'nt)	Andre	ew J. M	icCalmo	nt	Tist-	Asset Mana	ioer				
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			/ 1	/	-41.7 A I		Date	,,					
Signati	are	- WW	<del>~  </del>		20, 1	<del></del>	Date						

WELL NAME AND NUMBER Chave	es Federal No. b	
LOCATION 1980' FSL & 1980	O. FEL, Section 17, T7S, R26E, C	haves County NM
OPERATOR Chesapeake Oper	ating, Inc.	
DRILLING CONTRACTOR . Unit	ed Drilling, Inc.	
of the drilling contractor	y certifies that he is an author who drilled the above described obtained the following results:	well and had con-
Degrees @ Depth	Degrees @ Depth	Degrees @ Depth
1/2° 516'		
1/2° 1036'		
3/4° 1509'		• 1
3/4° 2015'		
1/2° 2997'		RECEIVED
3/4° 3534 T		8 2003
1/2° 4008'		OCD-ARTESI
	, i	
	Drilling Contractor United Dr	rilling, Inc.
	By:	Tazar D
	Title: Vice Pre	sident
Subscribed and sworn to bef	fore me this 15th day of Sep	tombes,,
20 <u>0.3</u> .	<del></del>	_
	Karma Jas	loisley
est experience of the second	Notary P	DDIIC
My Commission Expires: 09-		N/A
A CONTRACTOR OF THE PARTY OF TH	County St	ate
Management of the second of th		

## CURRENT WELLBORE SCHEMATIC CHESAPEAKE OPERATING INC

WELL

**CHAVES A FEDERAL 6** 

**FIELD** 

**PECOS SLOPE** 

COUNTY

**CHAVES** 

STATE: NM

1,980' FNL & 1,980' FEL, SEC. 21-T7S-R26E

**OBJECTIVE:** 

**VERTICAL DEVELOPMENT WELL** 

LOCATION: **ELEVATION:** 

3,716' GL 3,725' RKB

**BLM LEASE:** 

NM-022584

**ΔPI #:** 

30-005-63571

SPUD DATE:

9/2/03

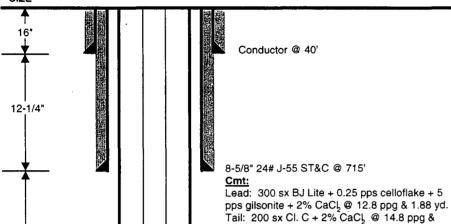
Chesapeake

Natural Advantages

RIG RELEASED: 9/12/03 FIRST SALES: 11/24/03

HOLE SIZE

7-7/8



133 Jts. 2-3/8" N-80 4.7# tbg.

1.34 yd. (Circ. 158 sx to surface)

Est. TOC @ 3,600

## Well History:

COMPLETION
10/8/03: Perf ABO C @ 4,224-98' OA, total 22 holes. BD Perfs @ 1007 10/8/03: Perf ABO C @ 4,224-98' OA, total 22 holes. BD Perfs @ 1007 psi w/ 1000 gals. NeFe acid. Frac Abo C w/ 20,000 gals. 65Q CQ foamed Aqua Vis 30 pad & 45,000 gals. 65Q CQ Aqua Vis 30 foam w/ 1-5 ppg 20/40 Brady sand, ramped to 5 ppg (total 150K# sand). Flush w/ 2000 gals 15% NeFe + 29 bbls. Aqua Vis 30. ISIP 930 psi, 5 min 852 psi, 10 min 812 psi, 15 min 795 psi. ATP 2330 psi, ATR 29.9 BPM, MTP 2599 psi, 769 BLTR. RIH w/ GR/JB to 4250'. MU & RIH w/ Baker Composite BP. Set @ 4160'. Perf Abo B @ 4026, 4029, 4032, 4076, 4079, 4082, 4088, 4091, 4094, & 4097' w/ 2 spf, 180Ph, 0.42" holes. Perfs would not break. RIH w/dump bailer w/ 15% NeFe, tag sand @ 3927'. Bailer stuck in sand, unable to get past 3926'. Sand fill came in after perfing Abo B. Attempt to free bailer, pulled out of rope socket. POOH w/ elec. cable, rel. all equip. Prepare to fish dump bailer

Socket. FOOM we rec. cable, let. all equip. Prepare to isrruting baller & CO tbg. SWI, WO tbg.

10/11/03: Tally tbg. RU PU; well on vac. ND frac valve, NU WH.

10/13/03: RIH w/ bit, BS, 6 DC's & 40 jts. tbg. Foam out csg, mud, acid water, & gel water returns. Tag fish @ 3931', foam out csg, tag fish @ 4026', push down hole. SD 1 hr, RIH & tag fish @ 4074'. 4026', push down hole. SD 1 hr, RIH & tag fish @ 4074'.

10/14/03: RIH w/ skirted overshot, bumper sub & jars; caught & TOH w/ fish. RIH w/ bit, tag sand @ 4088' & CO to 4150' w/ foam unit. SISD.

10/15/03: TIH w/ 8' sub, Arrowset Pkr, SN, & 130 jts. tbg. Set Pkr @ 4145'. Test Composite BP to 3000 psi, rel. pkr. & re-set @ 3962'.

Acidize w/ 1500 gals. 15% NeFe, broke back @ 3400 to 2900 psi when acid on fmtn. @ 6 BPM. Flush w/ 35 bbls. 2% KCl. ISIP 560 psi, 5 min 360 psi, 10 min 330 psi, 15 min 320 psi. Min TP 2600 psi, Max TP 3400 psi, ATP 2900 psi. Min TR, Max TR, & ATR 6 BPM. TLTR 85 Bbls. TOH w/ pkr, SN & tbg. ND BOP & WH,NU frac valve, RDPU, SISD.

10/23/03: Test lines & load well. Pump 5000 gals Aquavis 30G. Pump 20,000 gal. pad 65Q foam, frac w/ 45,000 gal 65Q foam & 150,090# 20/ 40 brown sand. Ran out of CQ w/ 220 bbls. sand laden fluid left. Had 5 40 brown sand. Ran out of CQ w/ 220 bbls. sand laden fluid left. Had 5 ppg sand on fmtn. pumping @ 30 BPM & 2545 psi. Finished frac w/ gel @ 23 BPM & 950 psi. MTR 30.1 bpm, ATR 25.6 bpm, Min TR 17.6

@ 23 BPM & 950 psi. MTH 30.1 bpm, ATH 25.6 bpm, Min TH 17.6 bpm. MTP 2567 psi, ATP 1933 psi, Min TP 947 psi. ISIP 947 psi, 5 min 724 psi, 10 min 685 psi, 15 min 670 psi. TLTR 638 bbls.
10/25/03: Post frac FB 56 hrs, total 465 bbls foam wtr. Last 10 hrs. lifting 1 BPH, some CQ returns. FCP 20 psi on 48/64 ck, SWI @ 6 am. 10/29/03: RUPU, prepare to run tbg.
10/30/03: SICP 550 psi. Kill well w/ 20 bbls KCI. TIH w/ bit & DC's, DO RUS West down and to TP @ 4435'. Circ. bottoms up. SISD.

10/30/03: SICP 550 psi. Kill well w 20 bbls KCI. TIH w/ bit & DC's, DO plug. Wash down and tag TD @ 4435'. Circ. bottoms up; SISD. 10/31/03: Kill well. CO sand from 4420' to 4435' KBM, circ. bottoms up. TIH w/ notched collar, SN & 133 jts. tbg. 15 hr. flow test 2-3 bwph, 590 mcf w/ 20% CQ, on 32/64 ck, 60 psi FTP, 225 psi CP. D-120, S-55. 11/1/03: 24 hr. FT: Est. 395 mcf, 25% CQ, on 32/64 ck w/ 80 psi TP & 155 psi CP. FB 23 bbls foam & water, 53 bbls total in last 32 hrs. 11/2/03: 24 hr. FT: Est. 611 mcf, 20% CQ, on 32/64 ck w/ 65 psi TP & 125 psi CP. FB 19 bbls foam & water, 72 bbls total in last 59 hrs. 11/3/03: 24 hr. FT: Est. 616 mcf, 12% CQ, on 24/64 ck w/ 70 psi TP & 125 psi CP. FB 13 bbls water, 85 bbls total in last 89 hrs. 11/4/03: 24 hr. FT: Est. 465 mcf, 12% CQ, on 16/64 ck w/ 125 psi TP & 150 psi CP. No fluid prodn. last 24 hrs.

11/5/03: SI @ 7 am. Rel. FT & test sep. Held 55# BP on sep while flwg.
11/24/03: 1st gas sales @ 2:40 pm to Commanche; spot rate 376 mcfd.

& 150 psi CP. No fluid prodn. last 24 hrs.

Abo B Perfs: 4,026-4,097' OA (22 Holes)

SN @ 4210' Notched Collar

Abo C Perfs: 4,224-4,298' OA (22 Holes)

PBTD (sand fill) @ 4,435'

4-1/2" 11.6# J-55 LT&C @ 4,492'

275 sx Cl. C + 0.8% BA-10 + 0.3% CD-32 + 5 pps LCM-1 @ 14.8 ppg & 1.33 yd.

PREPARED BY : Ginni A. Kennedy UPDATED BY : Ginni A. Kennedy

TD @ 4.500

DATE: 9/15/03

DATE: 11/25/03