

Form 3160-3
(August 2007)FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

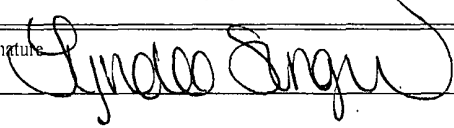
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC061616A
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator CHESAPEAKE OPER. AGENT FOR BOPCO ATTN: LINDA GOOD 405-935-4275		7. If Unit or CA Agreement, Name and No. NMNM71016X
3a. Address P.O. BOX 18496 OKLAHOMA CITY, OK 73154-0496	3b. Phone No. (include area code) 405-935-4275	8. Lease Name and Well No. PLU BIG SINKS 3 25 30 USA 1H ³⁹³⁸⁹
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 200' FSL & 2130' FEL, SWSE At proposed prod. zone 100' FNL & 2130' FEL, NWNE		9. API Well No. 30-015-40581
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 43 MILES SE OF LOVING, NEW MEXICO		10. Field and Pool, or Exploratory WILDCAT; BONE SPRING ^{G-86 32530020; B.S.}
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) SHL 200' FSL OF UNIT		11. Sec., T. R. M. or Blk. and Survey or Area 3-25S-30E ^{979B}
16. No. of acres in lease 2404.600 ACRES	17. Spacing Unit dedicated to this well 163.72 ACRES 160.3 per Lyndee Songer 4-27-12 DM	12. County or Parish EDDY
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 250' from the BHL of Big Sinks 34 24 30 USA 1H	19. Proposed Depth 13,896' MD / 9064' TVD	13. State NM
20. BLM/BIA Bond No. on file ESB000159	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3317' GL	22. Approximate date work will start* 11/19/2012
23. Estimated duration 30 DAYS		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- | | |
|---|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office) | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature 	Name (Printed/Typed) Lyndee Songer for Linda Good	Date 04/24/2012
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Title
Regulatory Analyst III

Approved by (Signature) <i>/s/ Don Peterson</i>	Name (Printed/Typed) <i>/s/ Don Peterson</i>	Date AUG - 1 2012
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Title <i>Don</i> FIELD MANAGER	Office CARLSBAD FIELD OFFICE
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Application approval 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.

Conditions of approval, if any, are attached.

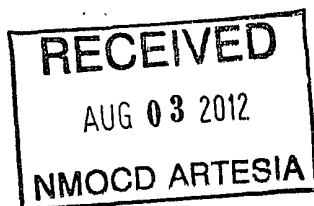
APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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 as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

Carlsbad Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL"NSL LOCATION"
TES
8/7/2012

ONSHORE ORDER NO. 1
Chesapeake Agent for BOPCO
PLU-Big Sinks 3-25-31 USA 1H
Section 3-25S-31E
Eddy County, NM

CONFIDENTIAL – TIGHT HOLE
OPERATOR CERTIFICATION

Lease No. NMNM61616A

CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Executed this 17th day of FEBRUARY, 2012

Name: Toby Reid
Toby Reid – Field Representative

Address: 1616 W. Bender, Hobbs, NM 88241

Telephone: 575-725-8497

E-mail: toby.reid@chk.com

DISTRICT I

3623 N. French Dr., Hobbs, NM 88240
Phone (505) 352-8101 Fax: (505) 352-0720

DISTRICT II

811 S. First St., Artesia, NM 88210
Phone (505) 745-1253 Fax: (505) 745-0720

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 351-8170 Fax: (505) 351-0170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3150 Fax: (505) 476-3402

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-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

D AMENDED REPORT

API Number 30-015-40581	Pool Code 06403	Well Name WC G-06 S2530020; B.S.
Property Code 39389	Property Name PLU BIG SINKS 3 25 30 USA	Well Number 1H
OGRIU No. 147179	Operator Name CHESAPEAKE OPERATING CO.	Elevation 3317'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	3	25 S	30 E		200	SOUTH	2130	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
LOT 2	3	25 S	30 E		100	NORTH	2130	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
163.72 160.3	-Per Lynden 4-27-12	Singer DM	13896 8/1

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>LOT 4</p> <p>PROPOSED BOTTOM HOLE LOCATION</p> <p>Lot - N 32.166815080' Long - W 103.866997237' NMSPC- N 424734.984 E 685634.482 (NAD-83)</p> <p>Lot - N 32.166691370' Long - W 103.866513965' NMSPC- N 424676.494 E 644449.009 (NAD-27)</p> <p>Projected Penetration Point 330' FSL & 2130' FEL</p> <p>SURFACE LOCATION</p> <p>Lot - N 32.152969576' Long - W 103.867131160' NMSPC- N 419698.033 E 685814.857 (NAD-83)</p> <p>Lot - N 32.152845726' Long - W 103.866648474' NMSPC- N 419639.673 E 644430.024 (NAD-27)</p>	<p>LOT 2</p> <p>100'</p> <p>5037.0'</p> <p>Producing Area</p>	<p>2130'</p> <p>LOT 1</p>	<p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>Bryan Arrant</i> 02/16/2012 Signature Date Printed Name bryan.arrant@chk.com Email Address</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p><i>Gary L. Jones</i> FEBRUARY 13 2012 Date Surveyed Signature & Seal of Professional Surveyor Certificate No. Gary L. Jones 7977 N SURVEYS 26052</p>
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EXHIBIT

B

Additional Operator Remarks:

Chesapeake Operating, Inc. respectfully requests permission to drill a well to 13,896' to test the Bone Spring formation. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and New Mexico Oil Conservation Division requirements.

Please find the Surface Use Plan and Drilling Plan as required by Onshore Order No. 1.

Attached are the Exhibit A-1 to A-4 Survey plats, Exhibit B 1 mile radius plat, Exhibit C Production facility, Exhibit D Patterson Rig #62 layout, Exhibit F-1&F-2 BOP & Choke Manifold, Exhibit G Standard Planning Report, Wellbore Schematic and Form C-144 Closed-Loop System Permit.

Archeological Survey will be delivered to the BLM when completed

Chesapeake Operating, Inc. has an agreement with the grazing lessee.

Please be advised that Chesapeake Operating, Inc. is the Designated Agent for BOPCO, the Operator of this unit. Chesapeake Operating, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

(CHK PN 643902)

Eddy, NM

DRILLING PLAN
PAGE 1

OHSORE OIL & GAS ODER 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**

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA	KBTVD	MD
Rustler	2329	1011	
Top of Salt	2085	1255	
Base of Salt	-382	3722	
Lamar	-589	3929	
Bell Canyon	-606	3946	
Cherry Canyon	-1466	4806	
Brushy Canyon	-2718	6058	
Bone Spring	-4428	7768	
1st Bone Spring Sand	-5360	8700	
Pilot TD	-6060	9400	
Lateral TD	-5687	9064	13896

2. **ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS**

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:

Substance	Formation	Depth
Water	Rustler	1011
Oil/Gas	Brushy Canyon	6058
Oil/Gas	Bone Spring	7768

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

Eddy, NM

DRILLING PLAN
PAGE: 2

3. BOP EQUIPMENT

Will have a 5000 psi rig stack (see proposed schematic) for drill out below surface casing. Stack will be tested as specified below. Surface casing and Intermediate Casing shoes will be tested to 10.5 ppg equivalent after drilling out 10' of new formation.

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
 - (d) Upper and lower kelly cock valves, inside BOP's and safety valves

B. Frequency

1. All tests shall 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
 - (d) at least once every 30 days while drilling

C. Frequency

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.

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 BO's are tested, or any time a major repair is performed.

Eddy, NM

DRILLING PLAN
PAGE: 3

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, without recharging and the pump turned off, and have remaining pressures of 200 psi above the precharge pressure.
2. Minimum precharge pressures for the various accumulator systems per manufacturers recommended specifications are as follows:

System Operating Pressure	Precharge Pressure
1500 psi	750 psi
2000 psi	1000 psi
3000 psi	1000 psi

3. Closing times for the annular preventer should be less than 20 seconds and for the ram-type preventers less than 10 seconds.
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
3. Record time to close or open each element and the remaining accumulator pressure after each operation.
4. Record the remaining accumulator pressure at the end of the test sequence. Per the previous requirement, this pressure should not be less than the following pressures:

System Operating Pressure	Remaining Pressure After Test
1500 psi	950 psi
2000 psi	1200 psi
3000 psi	1200 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 full open or full closed position. Do not leave in neutral position.

3. CASING PROGRAM

- a. The proposed casing program will be as follows:

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	1,125'	17-1/2"	13-3/8"	48 #	H-40	STC	New
Shallow Intermediate	0'	3,850'	11"	8-5/8"	32 #	J-55	LTC	New
Production	0'	13,896'	7-7/8"	5-1/2"	17.0 #	P-110	LTC	New

- b. Casing design subject to revision based on geologic conditions encountered.

c. Casing Safety Factors

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension
Surface	1.44	1.51	2.19
Shallow Intermediate	2.14	1.27	2.04
Production	1.37	1.67	1.91

Min SF is the smallest of a group of safety factors that include the following considerations:

	Surf	Int	Prod
Burst Design			
Pressure Test- Surface, Int, Prod Csg P external: Water P internal: Test psi + next section heaviest mud in csg	X	X	X
Displace to Gas- Surf Csg P external: Water P internal: Dry Gas from Next Csg Point	X		
Frac at Shoe, Gas to Surf- Int Csg P external: Water P internal: Dry Gas, 15 ppg Frac Gradient		X	
Stimulation (Frac) Pressures- Prod Csg P external: Water P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Water P internal: Leak just below surf, 8.7 ppg packer fluid			X
Collapse Design			
Full Evacuation P external: Water gradient in cement, mud above TOC P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: water	X	X	X
Tension Design			
100k lb overpull	X	X	X

DRILLING PLAN

Eddy, NM

PAGE: 5

5. CEMENTING PROGRAM

Slurry	Type	Top	Btm	Wt	Yld	%Exc	Sx
Surface				(ppg)	(sx/cu ft)	Open Hole	
Single Slurry	C + 4% Gel	0'	1,125'	13.5	1.73	200	1332
Shallow Int							
Lead	TXI + 5% Salt	0'	3,350'	12	1.99	200	1116
Tail	50C/50Poz +5% Salt	3,350'	3,850'	14.2	1.37	200	290
Production							
Lead	35/65Poz H +8% Gel	3,350'	8,587'	12.4	2.11	75	723
Tail	50/50Poz H +2% Gel	8,587'	13,896'	14.5	1.27	75	1277

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. The production casing will be cemented in a single stage.
4. Production casing will have one centralizer on every other joint from TD to KOP (horizontal type) and from KOP to intermediate casing (bowspring type).

Pilot Hole Plugging Plan:

Pilot hole will be plugged back from TD of 9,400' TVD to KOP of 8,587' TVD with a single balanced plug using tubing that will be cemented in place on the bottom of the Smith Trackmaster OH-Openhole whipstock cementing system (previously approved by BLM). This will be accomplished using 390 sx (40% excess) of 17.0 ppg 0.99 cuft/sk yield Class H cement.

Eddy, NM

DRILLING PLAN
PAGE 6

6. MUD PROGRAM

From	To	Type	Weight	F. Vis	Filtrate
0'	1,125'	Spud Mud	8.4 - 8.7	32 - 34	NC - NC
1,125'	3,850'	Brine	9.5 - 10.1	28 - 29	NC - NC
3,850'	8,587'	Cut Brine	8.3 - 9	28 - 29	NC - NC
8,587'	9,400'	Cut Brine	8.3 - 9	28 - 29	NC - NC
8,587'	9,337'	Cut Brine	8.3 - 9	28 - 29	NC - NC
9,337'	13,896'	Cut Brine	8.3 - 9	28 - 29	NC - NC

A closed system will be utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations.

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

7. TESTING, LOGGING, AND CORING See COA

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

- Drill stem tests are not planned.
- The logging program will be as follows:

TYPE	Logs	Interval	Timing	Vendor
Mud Log	2 man Mudlog	Surf to TD	Spud	Suttles
OH	Triple Combo	Pilot TD to Int Csg	After Pilot TD	TBD
OH	GR/Neutron	Int Cas to Surf	After Pilot TD	TBD
LWD	MWD Gamma	Curve and Lateral	While Drilling	Phoenix

- Core samples are not planned.
- A Directional Survey will be run.

8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

- No abnormal pressures or temperatures are expected. Estimated BHP is: 4006 psi
- Hydrogen sulfide gas is not anticipated.

Permian District

Poker Lake

PLU Big Sinks 3-25-30 USA 1H

Well #1

Wellbore #1

Plan: Plat

Standard Planning Report

27 March, 2012

EXHIBIT 6

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well Well #1
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU Big Sinks 3-25-30 USA 1H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Project:	Poker Lake, Eddy County, NM		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	PLU Big Sinks 3-25-30 USA 1H
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Site Position:	Map	Northing:	419,698.03 usft	Latitude:	32.152970
From:		Easting:	685,614.85 usft	Longitude:	-103.867131
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.25 °

Well:	Well #1					
Well Position	+N/-S	0.00 ft	Northing:	419,698.03 usft	Latitude:	32.152970
	+E/-W	0.00 ft	Easting:	685,614.85 usft	Longitude:	-103.867131
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	0.00 ft

Wellbore:	Wellbore #1
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	1/27/2012	7.63	60.08	48,520

Design:	Plat
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Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	0.22

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,586.53	0.00	0.00	8,586.53	0.00	0.00	0.00	0.00	0.00	0.00	
9,336.54	90.00	0.22	9,064.00	477.46	1.86	12.00	12.00	0.00	0.22	
13,896.05	90.00	0.22	9,064.00	5,036.94	19.63	0.00	0.00	0.00	0.00	0.00 Bing Sink 3-25-30 E

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well Well #1
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU Big Sinks, 3-25-30 USA 1H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well: Well #1
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU: Big Sinks 3-25-30 USA 1H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plot		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,586.53	0.00	0.00	8,586.53	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	1.62	0.22	8,600.00	0.19	0.00	0.19	12.00	12.00	0.00
8,700.00	13.62	0.22	8,698.94	13.42	0.05	13.42	12.00	12.00	0.00
8,800.00	25.62	0.22	8,792.96	46.93	0.18	46.93	12.00	12.00	0.00
8,900.00	37.62	0.22	8,877.96	99.25	0.39	99.26	12.00	12.00	0.00
9,000.00	49.62	0.22	8,950.23	168.11	0.65	168.11	12.00	12.00	0.00
9,100.00	61.62	0.22	9,006.60	250.49	0.98	250.49	12.00	12.00	0.00
9,200.00	73.62	0.22	9,044.61	342.78	1.34	342.78	12.00	12.00	0.00
9,300.00	85.62	0.22	9,062.60	440.96	1.72	440.97	12.00	12.00	0.00
9,336.54	90.00	0.22	9,064.00	477.46	1.86	477.47	12.00	12.00	0.00
9,400.00	90.00	0.22	9,064.00	540.93	2.11	540.93	0.00	0.00	0.00
9,500.00	90.00	0.22	9,064.00	640.93	2.50	640.93	0.00	0.00	0.00
9,600.00	90.00	0.22	9,064.00	740.92	2.89	740.93	0.00	0.00	0.00
9,700.00	90.00	0.22	9,064.00	840.92	3.28	840.93	0.00	0.00	0.00
9,800.00	90.00	0.22	9,064.00	940.92	3.67	940.93	0.00	0.00	0.00
9,900.00	90.00	0.22	9,064.00	1,040.92	4.06	1,040.93	0.00	0.00	0.00
10,000.00	90.00	0.22	9,064.00	1,140.92	4.45	1,140.93	0.00	0.00	0.00
10,100.00	90.00	0.22	9,064.00	1,240.92	4.83	1,240.93	0.00	0.00	0.00
10,200.00	90.00	0.22	9,064.00	1,340.92	5.22	1,340.93	0.00	0.00	0.00
10,300.00	90.00	0.22	9,064.00	1,440.92	5.61	1,440.93	0.00	0.00	0.00
10,400.00	90.00	0.22	9,064.00	1,540.92	6.00	1,540.93	0.00	0.00	0.00
10,500.00	90.00	0.22	9,064.00	1,640.92	6.39	1,640.93	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well Well #1
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU Big Sinks 3-25-30 USA 1H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan		

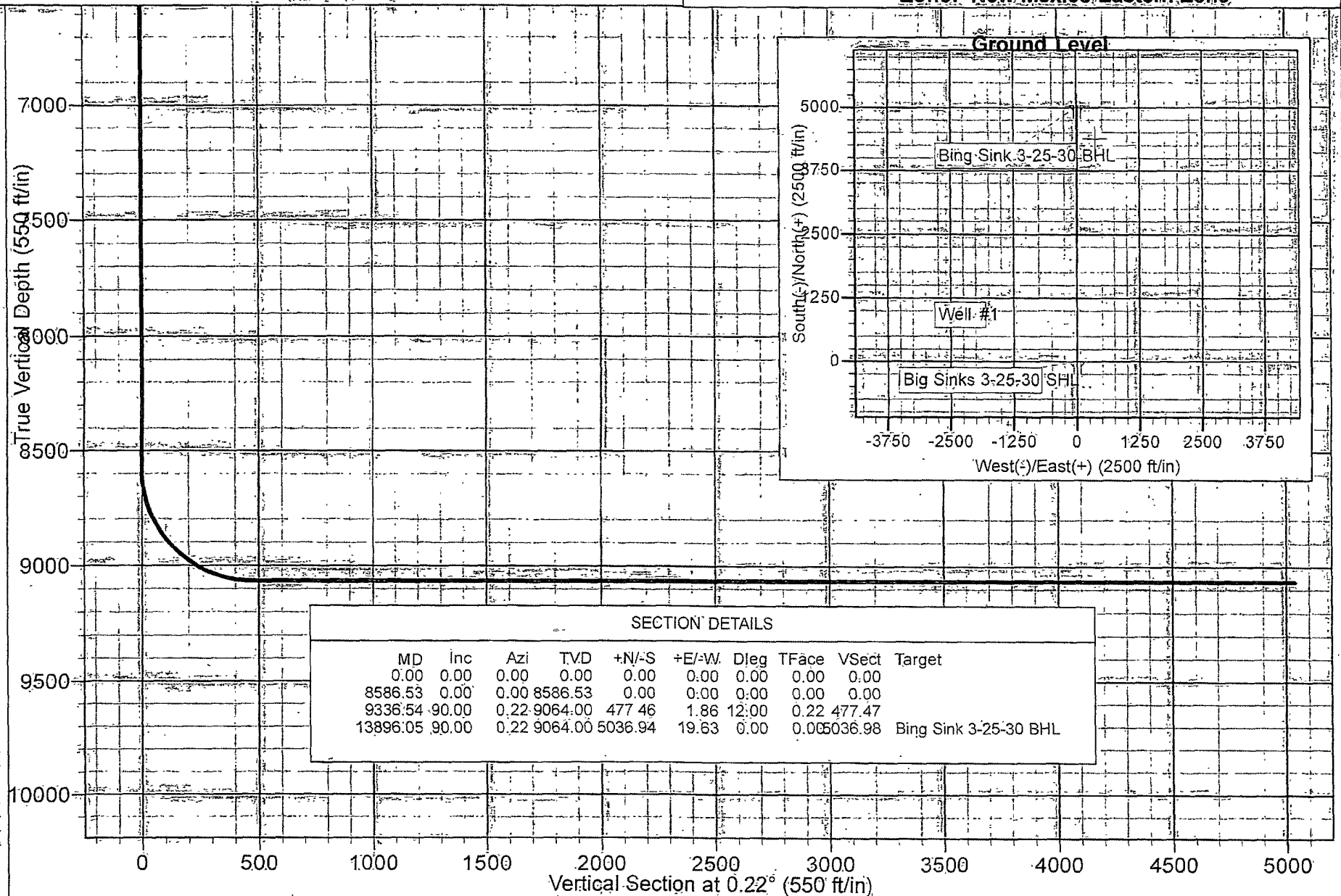
Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (%/100usft)	Build Rate (%/100usft)	Turn Rate (%/100usft)	
10,600.00	90.00	0.22	9,064.00	1,740.92	6.78	1,740.93	0.00	0.00	0.00	
10,700.00	90.00	0.22	9,064.00	1,840.92	7.17	1,840.93	0.00	0.00	0.00	
10,800.00	90.00	0.22	9,064.00	1,940.92	7.56	1,940.93	0.00	0.00	0.00	
10,900.00	90.00	0.22	9,064.00	2,040.91	7.95	2,040.93	0.00	0.00	0.00	
11,000.00	90.00	0.22	9,064.00	2,140.91	8.34	2,140.93	0.00	0.00	0.00	
11,100.00	90.00	0.22	9,064.00	2,240.91	8.73	2,240.93	0.00	0.00	0.00	
11,200.00	90.00	0.22	9,064.00	2,340.91	9.12	2,340.93	0.00	0.00	0.00	
11,300.00	90.00	0.22	9,064.00	2,440.91	9.51	2,440.93	0.00	0.00	0.00	
11,400.00	90.00	0.22	9,064.00	2,540.91	9.90	2,540.93	0.00	0.00	0.00	
11,500.00	90.00	0.22	9,064.00	2,640.91	10.29	2,640.93	0.00	0.00	0.00	
11,600.00	90.00	0.22	9,064.00	2,740.91	10.68	2,740.93	0.00	0.00	0.00	
11,700.00	90.00	0.22	9,064.00	2,840.91	11.07	2,840.93	0.00	0.00	0.00	
11,800.00	90.00	0.22	9,064.00	2,940.91	11.46	2,940.93	0.00	0.00	0.00	
11,900.00	90.00	0.22	9,064.00	3,040.91	11.85	3,040.93	0.00	0.00	0.00	
12,000.00	90.00	0.22	9,064.00	3,140.91	12.24	3,140.93	0.00	0.00	0.00	
12,100.00	90.00	0.22	9,064.00	3,240.91	12.63	3,240.93	0.00	0.00	0.00	
12,200.00	90.00	0.22	9,064.00	3,340.90	13.02	3,340.93	0.00	0.00	0.00	
12,300.00	90.00	0.22	9,064.00	3,440.90	13.41	3,440.93	0.00	0.00	0.00	
12,400.00	90.00	0.22	9,064.00	3,540.90	13.80	3,540.93	0.00	0.00	0.00	
12,500.00	90.00	0.22	9,064.00	3,640.90	14.19	3,640.93	0.00	0.00	0.00	
12,600.00	90.00	0.22	9,064.00	3,740.90	14.58	3,740.93	0.00	0.00	0.00	
12,700.00	90.00	0.22	9,064.00	3,840.90	14.97	3,840.93	0.00	0.00	0.00	
12,800.00	90.00	0.22	9,064.00	3,940.90	15.35	3,940.93	0.00	0.00	0.00	
12,900.00	90.00	0.22	9,064.00	4,040.90	15.74	4,040.93	0.00	0.00	0.00	
13,000.00	90.00	0.22	9,064.00	4,140.90	16.13	4,140.93	0.00	0.00	0.00	
13,100.00	90.00	0.22	9,064.00	4,240.90	16.52	4,240.93	0.00	0.00	0.00	
13,200.00	90.00	0.22	9,064.00	4,340.90	16.91	4,340.93	0.00	0.00	0.00	
13,300.00	90.00	0.22	9,064.00	4,440.90	17.30	4,440.93	0.00	0.00	0.00	
13,400.00	90.00	0.22	9,064.00	4,540.90	17.69	4,540.93	0.00	0.00	0.00	
13,500.00	90.00	0.22	9,064.00	4,640.89	18.08	4,640.93	0.00	0.00	0.00	
13,600.00	90.00	0.22	9,064.00	4,740.89	18.47	4,740.93	0.00	0.00	0.00	
13,700.00	90.00	0.22	9,064.00	4,840.89	18.86	4,840.93	0.00	0.00	0.00	
13,800.00	90.00	0.22	9,064.00	4,940.89	19.25	4,940.93	0.00	0.00	0.00	
13,896.05	90.00	0.22	9,064.00	5,036.94	19.63	5,036.98	0.00	0.00	0.00	

Design Targets										
Target Name	Hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	Northing (usft)	Eastings (usft)	Latitude	Longitude
Big Sinks 3-25-30 SH - plan hits target center - Point		0.00	0.00	0.00	0.00	0.00	419,698.03	685,614.85	32.152970	-103.867131
Bing Sink 3-25-30 BH - plan hits target center - Point		0.00	0.00	9,064.00	5,036.94	19.63	424,734.96	685,634.48	32.166815	-103.866997

Project: Poker Lake
 Site: PLU Big Sinks 3-25-30 USA 1H
 Well: Well #1
 Wellbore: Wellbore #1
 Design: Plat

PROJECT DETAILS: Poker Lake

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone





Drilling Engineer: Chris Gray

Superintendent: Daniel Gipson

Geologist: Chris Persellin

Well Name: PLU Big Sinks 3-25-30 USA 1H
Target: First Bone Spring Shale
County, State: Eddy, NM

Surface Location: 200' FSL 2130' FEL, Section 3, Township 25S, Range 30 E

BH Location: 100 FNL 2130' FEL, Section 3, Township 25S, Range 30 E

SHL Latitude: 32.152970 SHL North: 419698
SHL Longitude: -103.867131 SHL East: 685614857
BHL Latitude: 32.16681508 BHL North: 424735
BHL Longitude: -103.8669972 BHL East: 685634
Coordinates: NAD 83 Coordinates: NMSPCE

Drilling Rig: Patterson 62

Directional: Phoenix

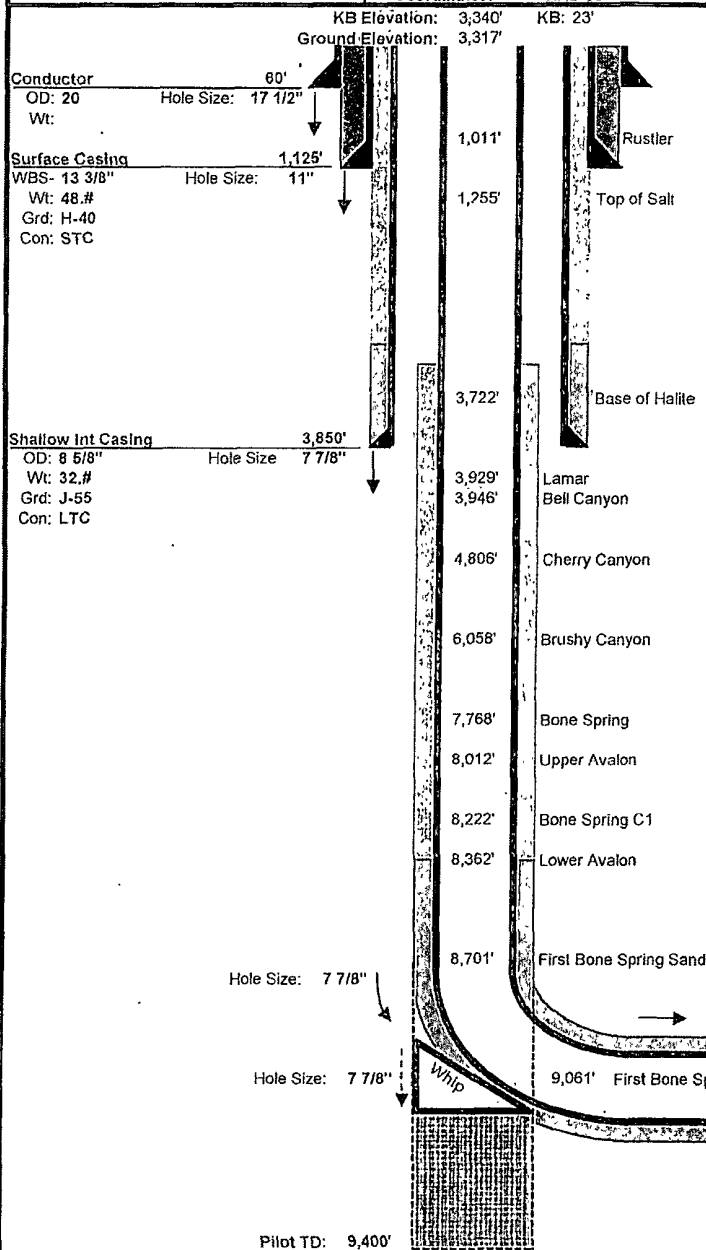
Drilling Mud: Nova

Cement: Schlumberger

Wellhead: Sunbelt

Property Number: 643902

AFE Number: 162163



Wellhead Equipment	
A Section	13-3/8" x 13-5/8" 5K SOW (Multibowl)
B Section	N/A (Multibowl)
C Section	11" 5K X 7-1/16" 10K w/10k gate valve
D Section	N/A
Required BOP Stack	13-5/8" 5K- Double, Annular, Rot Head w/orbit valve

Mud				
Depth	Type	Weight	F. Vis	FL
0' - 1,125'	Spud Mud	8.4 - 8.7	32 - 34	NC - NC
1,125' - 3,850'	Brine	9.5 - 10.1	28 - 29	NC - NC
3,850' - 8,587'	Cut Brine	8.3 - 9	28 - 29	NC - NC
8,587' - 9,400'	Cut Brine	8.3 - 9	28 - 29	NC - NC
9,400' - 9,337'	Cut Brine	8.3 - 9	28 - 29	NC - NC
9,337' - 13,896'	Cut Brine	8.3 - 9	28 - 29	NC - NC

Cement							
Slurry	Top	Btm	Wt	Yld	%Exc	Bbl	Sx
Surface							
Single Slurry	0'	1,125'	13.5	1.73	200	410	1332
Shallow Int							
Lead	0'	3,350'	12.0	1.99	200	396	1116
Tail	3,350'	3,850'	14.2	1.37	200	71	290
Production							
Lead	3,350'	8,587'	12.4	2.11	75	272	723
Tail	8,587'	13,896'	14.5	1.27	75	289	1277

Directional Plan						
Target Line:	9064' @ 0' VS w/90.0 deg inclination					
Target Window:	20' above, 20' below, 50' left, 50' right					
	MD	INC	AZM	TVD	VS	DLS
KOP	8,587'	0.00	0.00	8,587'	0'	0.00
EOB	9,337'	90.00	0.22	9,064'	477'	12.00
TD	13,896'	90.00	0.22	9,064'	5,037'	0.00
Hardlines:	Lateral- 330' from parallel lease lines.					
	Vertical- Actual Lease Lines					
Notes:	Please note SHL and BHL distance from lease lines					

Type	Logs	Interval	Vendor
Mud Log	2 man Mudlog	Surf to TD	Suttles
OH	Triple Combo	Pilot TD to Int Csg	TBD
OH	GR/Neutron	Int Cas to Surf	TBD
LWD	MWD Gamma	Curve and Lateral	Phoenix

Chesapeake Minimum BOPE Requirements

Wellname: PLU Big Sinks 3-25-30 USA 1H

Operation: Intermediate and Production Hole Sections

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

Permian District-Minimum Requirements

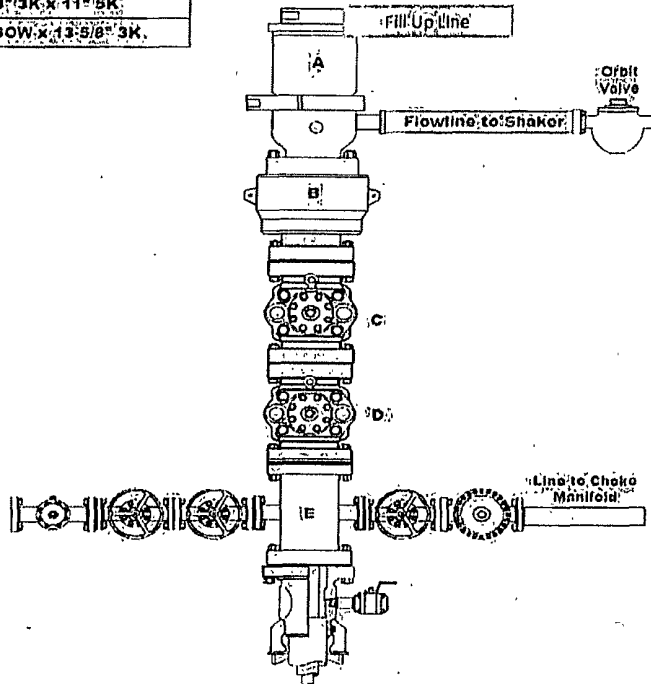
FIELD : Avalon

OPERATION: Intermediate and Production Hole Sections

	SIZE	PRESSURE	DESCRIPTION
A		500	Rotating Head
B	13 5/8"	5,000	Annular
C	13 5/8"	5,000	Pipe Ram
D	13 5/8"	5,000	Blind Ram
E	13 5/8"	5,000	Mud Cross
F			
DSA	As required for each hole size		
C-Sec			
B-Sec	13 5/8" 3K x 11" 3K		
A-Sec	13 5/8" 90W x 13 5/8" 3K		

Test Notes:

- Pressure test to rating of BOP or wellhead every 21 days.
- Function test on trips
- H2S service trim/required.



Kill Line

SIZE	PRESSURE	DESCRIPTION
12"	5,000	Check Valve
12"	5,000	Gate Valve
12"	5,000	Gate Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
3"	5,000	Gate Valve
3"	5,000	HCR Valve
3"	5,000	Stool Line Only

EXHIBIT F-1

Chesapeake Minimum BOPE Requirements

Wellname: PLU Big Sinks 3-25-30 USA 1H

Operation: Intermediate and Production Hole Sections

CHOKE MANIFOLD SCHEMATIC

CHESAPEAKE OPERATING INC

Permian District

Avalon Minimum Requirements

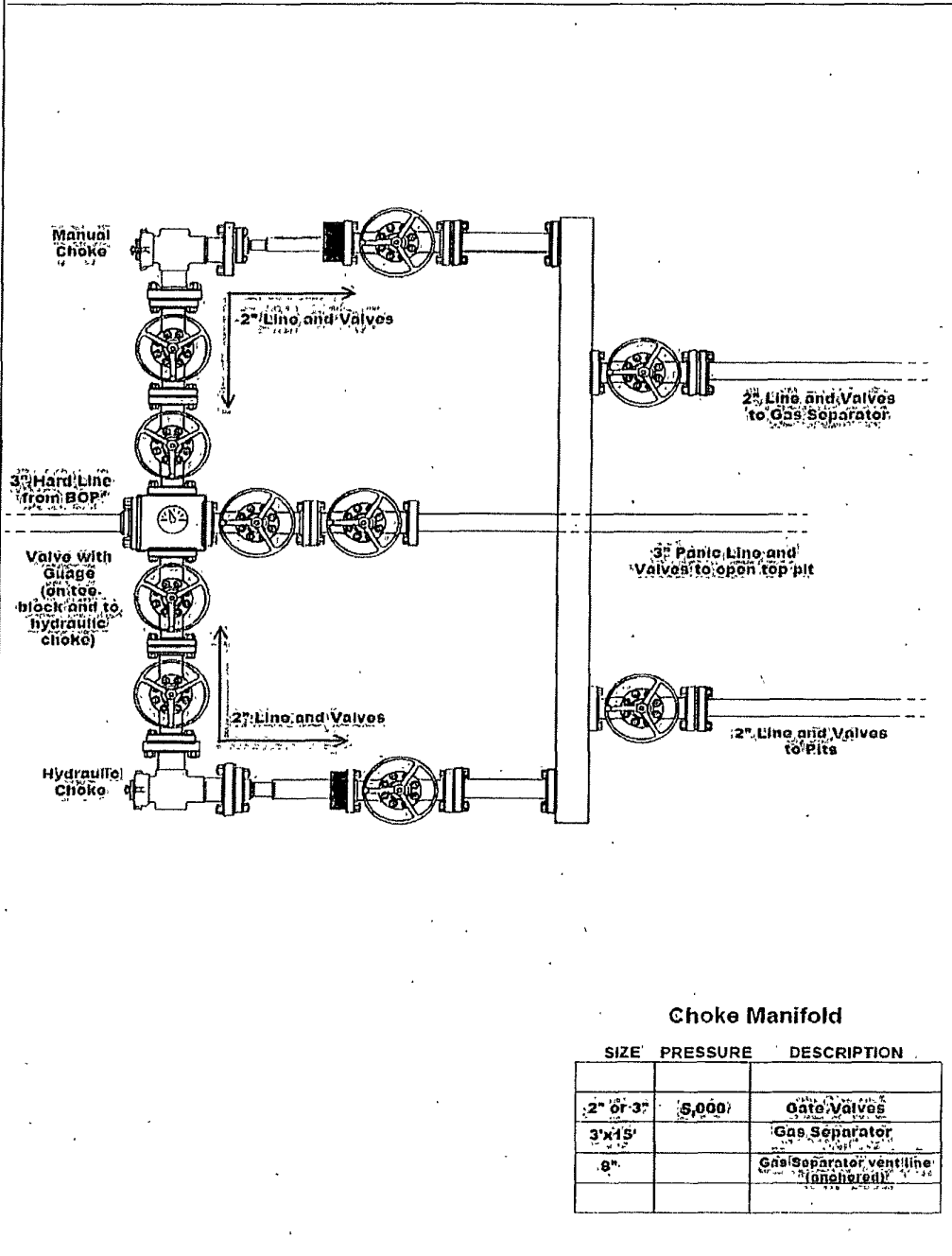


EXHIBIT F-2

**Chesapeake Operating, Inc.'s Closed Loop System
PLU BIG SINKS 3 25 30 USA 1H
Unit O, Sec. 3, T-25-S R-30-E
Eddy Co., NM
API # TBD**

Equipment & Design:

Chesapeake Operating, Inc. is to use a closed loop system with roll-off steel pits.

This rig has:

One Derrick FLC-503 Dual Shale Shaker

One Derrick 3-Cone Desander

One Atmospheric Degasser

One 500 bbl frac tank for fresh water

One 500 bbl frac tank brine water

Operations & Maintenance:

During each and every tour, the rig's drilling crew will inspect and monitor closely the drilling fluids contained within the steel pits and visually monitor any spill which may occur.

Within 48 hours should a spill, release or leak occur, the NMOCD District II office in Artesia (575-748-1283) will be notified. Please note that notifications may be made earlier to the district office should a greater release occur.

Closure:

During and after drilling operations, liquids (which apply), all drill cuttings and drilling fluids will be hauled and disposed to the Controlled Recovery, Inc.'s location.

The permit number for Controlled Recovery, Inc. is: NM-01-0006

The alternative disposal facility will be Sundance Disposal.

Their permit # is: NM-01-0003.



RIG #62

DRAWWORKS

Skytop Brewster N-75-M (1000HP)
1 1/4" drill line, Parmac 342 auxiliary brake

POWER

(2) Caterpillar 379 engines (550HP each)

LIGHT PLANTS

(2) Caterpillar C-15 engines w/ 320 KW generators

MAST

Ideal 137' w/ 622,000# capacity on 10 lines

SUBSTRUCTURE

Ideal 15' box on box
KB 17' Rotary beam clearance 12' 3"

BLOCK HOOK

McKissick (300 Ton) combo

PUMPS

(2) National 10-P-130 (1300HP each) triplex pumps
Each independently powered by (1) Caterpillar 3512 engine

MUD PITS

(2) tank system - 980 bbl capacity w/ 100 bbl slug pit

SOLIDS EQUIPMENT

Derrick FLC-503 Dual Shaker
Derrick 3-cone desander
Derrick 20-cone desilter
Atmospheric degasser
(5) mud agitators

BOP'S

13 5/8" X 5,000 psi Hydril annular
13 5/8" X 5,000 psi Shaffer double

ACCUMULATOR

Koomey 5-Station, 110 gallon accumulator

CHOKE MANIFOLD

5,000 psi choke manifold

SWIVEL

Continental Emsco (400 Ton)

ROTARY TABLE

National (27 1/2")

DRILL PIPE

4 1/2" drill pipe

DRILL COLLARS

8" and 6 1/2" drill collars
*quantity subject to availability

AUXILIARY EQUIPMENT

Pason EDR (base system)
Fuel Tank - 10,000 gallon capacity
Water Tank - (2) 500 barrel capacity each
Rig Manager Quarters
NOV ST-80 Iron Roughneck
Satellite automatic driller
Mathey survey unit

Revised 10.01.09



**PATTERSON-UTI
DRILLING COMPANY**



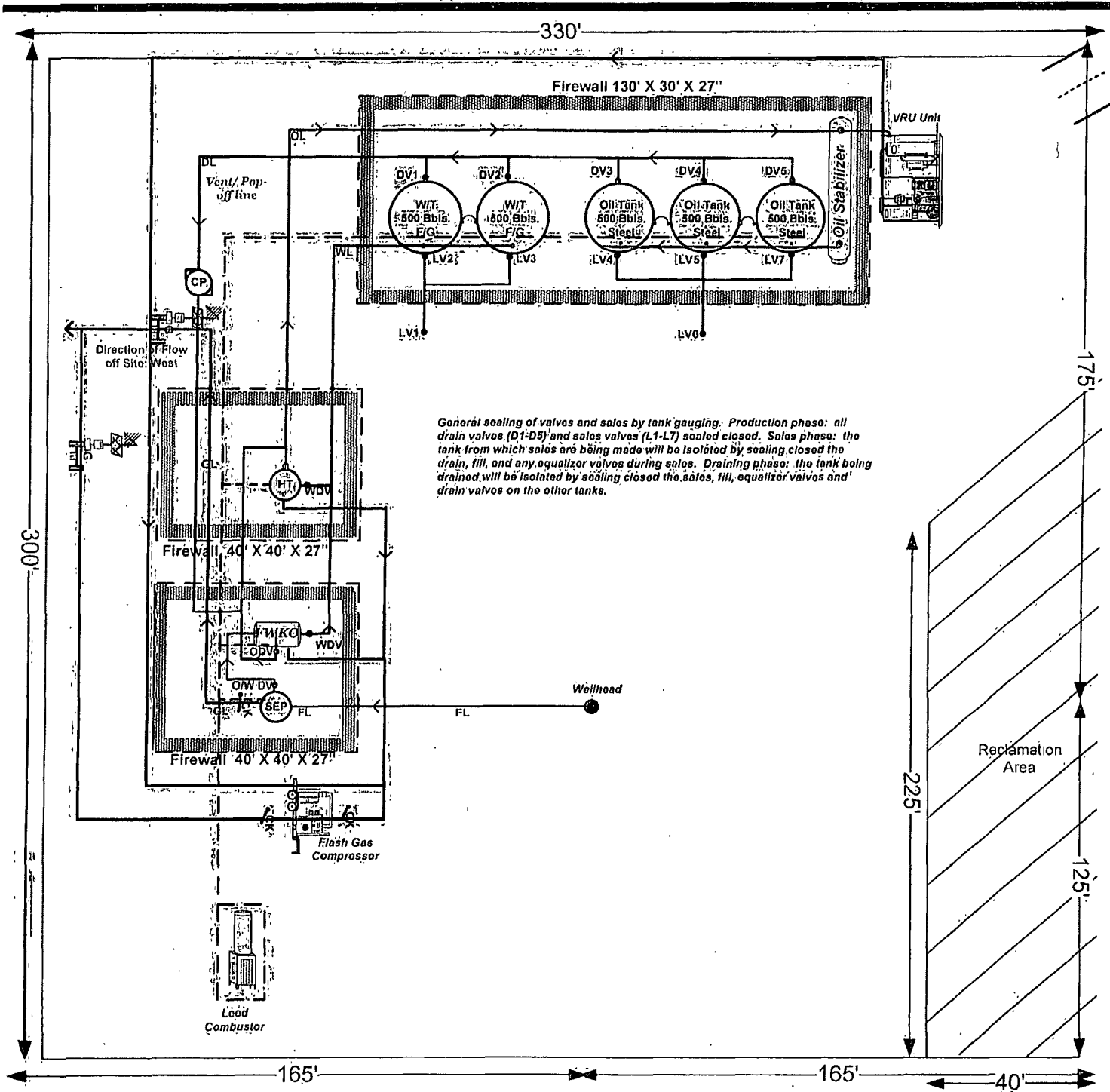
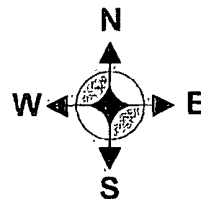
PLU Big Sinks 3-25-30 USA 1H

Property # 643902

Lat.: N 32.1529" – Long.: W 103.8666"

S03/T25S/R31E - 200' FSL & 2130' FEL

Eddy Co., New Mexico



Prepared by: Donny Lowry
Date: 2/29/2012

This lease is subject to Chesapeake's Site Security Plan located at 6100 N. Western Oklahoma City, OK 73118

All equipment shown will be on location, but subject to changes in positioning.

EXHIBIT C

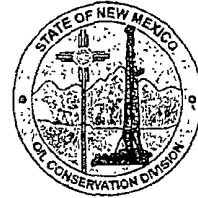
State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



April 16, 2012

Chesapeake Operating, Inc.
c/o Holland & Hart LLP
Attn: Mr. Adam G. Rankin

ADMINISTRATIVE NON-STANDARD LOCATION ORDER

Administrative Order NSL-6601
Administrative Application Reference No. pTWG12-08351170

Chesapeake Operating, Inc.
OGRID 147179
PLU Big Sinks 3 25 30 USA Well No. 1H
API No. 30-015

Proposed Location:

	Footages	Unit	Sec.	Township	Range	County
Surface	200 FSL & 2130 FEL	O	3	25S	30E	Eddy
Penetration Point	330 FSL & 2130 FEL	O	3	25S	30E	Eddy
Terminus	100 FNL & 2130 FEL	B	3	25S	30E	Eddy

Proposed Project Area:

Description	Acres	Pool	Pool Code
W/2 E/2 of Section 3	163.72	wildcat Bone Spring	

Reference is made to your application received on March 23, 2012.

You have requested to drill this horizontal well at an unorthodox oil well location described above in the referenced pool or formation. This location is governed by statewide Rule 15.9.A [19.15.15.9.A NMAC], which provides for 40-acre units, with wells located at least 330 feet from a unit outer boundary, and Rule 15.16.14.B(2) [19.15.16.14.B(2) NMAC] concerning directional wells in designated project areas. This location is unorthodox because portions of the proposed completed interval are less than 330 feet from an outer boundary of the project area.

Your application has been duly filed under the provisions of Division Rules 15.13 [19.15.15.13 NMAC] and 4.12.A(2) [19.15.4.12.A(2) NMAC].

April 16, 2012
Page 2

It is our understanding that you are seeking this location for engineering reasons, in order to maximize the productive length of the wellbore lateral within the project area.

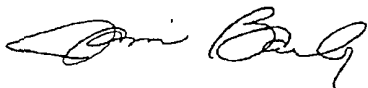
It is also understood that you have given due notice of this application to all operators or owners who are "affected persons," as defined in Rule 4.12.A(2), in all adjoining units towards which the proposed location encroaches.

Pursuant to the authority conferred by Division Rule 15.13.B, the above-described unorthodox location is hereby approved.

This approval is subject to your being in compliance with all other applicable Division rules, including, but not limited to Division Rule 5.9 [19.15.15.9 NMAC].

Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

A handwritten signature in black ink, appearing to read "Jami Bailey", is written above the typed name.

Jami Bailey
Director

JB/db

cc: New Mexico Oil Conservation Division – Artesia
United States Bureau of Land Management

DATE IN <u>3.23.12</u>	SUSPENSE	ENGINEER <u>DB</u>	LOGGED IN <u>3.23.12</u>	TYPE <u>NSL</u>	APP NO <u>1702351170</u>
------------------------	----------	--------------------	--------------------------	-----------------	--------------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



Chesapeake 147179

PLU BIG STOK 3-25-30 USA #1/H

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 _____

[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.

ADAM G. RANKIN

Print or Type Name

[Signature]
 Signature

ATTORNEY

Title

03/22/12

Date

agrarkin@hollandhart.com
 e-mail Address

HOLLAND & HART



Adam G. Rankin

Associate

Phone 505-954-7294

Fax 505-983-6043

AGRankin@hollandhart.com

March 22, 2012

VIA HAND DELIVERY

Jami Bailey
Oil Conservation Division
New Mexico Department of
Energy, Minerals and Natural Resources
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RECEIVED OGD
2012 MAR 22 P 3:19

Re: Application of Chesapeake Operating, Inc. for administrative approval of an unorthodox well location for its PLU Big Sinks 3 25 30 USA No. 1H well in the Bone Spring Pool Section 3, Township 25 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.

Dear Ms. Bailey:

Chesapeake Operating, Inc. (OGRID No. 147179) hereby seeks administrative approval pursuant to the provisions of Division Rule 19.15.15.13 NMAC for an unorthodox well location for its PLU Big Sinks 3 25 30 USA No. 1H well to be located in Section 3, Township 25 South, Range 30 East, N.M.P.M., Eddy County, New Mexico. The proposed wildcat well is to be drilled at a surface location 200 feet from the South line with a projected penetration point 330 feet from the South line and 2130 feet from the East line of Section 3. The bottom-hole location will be 100 feet from the North line and 2130 feet from the East line of Section 3. A 163.72-acre project area has been dedicated to this horizontal well comprised of the W/2 E/2 of Section 3.

Exhibit A is a land plat for Section 3 and surrounding sections that shows the proposed non-standard location of the PLU Big Sinks 3 25 30 USA No. 1H in relation to adjoining units and existing wells. This location is unorthodox because the Bone Spring formation under this acreage is governed by the Division's statewide rules which provide for wells on 40-acre spacing units to be located no closer than 330 feet to the outer boundary of the spacing unit. The bottom-hole location of this well will be located 100 feet from the North line of Section 3 for engineering reasons, and is, therefore, closer to the section line than allowed by Division rules.

Exhibit B is the Well Location and Acreage Dedication Plat (Form C-102), which shows that the proposed PLU Big Sinks 3 25 30 USA No. 1H well encroaches on the spacing and proration unit to the North.

Holland & Hart LLP

Phone (505) 988-4421 Fax (505) 983-6043 www.hollandhart.com

110 North Guadalupe Suite 1 Santa Fe, NM 87501 Mailing Address P.O. Box 2208 Santa Fe, NM 87504-2208

Denver Aspen Boulder Colorado Springs Denver Tech Center Billings Boise Cheyenne Jackson Hole Las Vegas Salt Lake City Santa Fe Washington, D.C. ☉

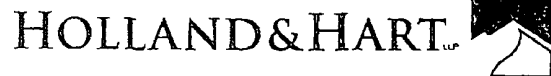


Exhibit C is a list of the affected parties. Pursuant to 19.15.4.12(A)(2)(c) NMAC, affected parties are those toward whom the non-standard location encroaches. Here, the proposed bottom-hole location encroaches to the North. The affected working interest is BOPCO, LP. A copy of this application with all attachments was mailed to the notice recipient.

Your attention to this application is appreciated.

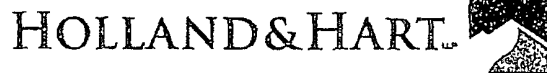
Sincerely,

Adam G. Rankin
ATTORNEY FOR CHESAPEAKE OPERATING, INC.

cc: David K. Brooks
Monty Montgomery, BOPCO
Teresa Long, Chesapeake Operating, Inc. w/o encls

EXHIBIT C
Chesapeake's NSL Application
PLU Big Sinks 3 25 30 USA No. 1H

BOPCO, LP
201 Main Street, Suite 3100
Ft. Worth, TX 76102



Adam G. Rankin
Phone 505-988-4421
Fax 505-983-6043
agrarkin@hollandhart.com

March 22, 2012

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

TO AFFECTED PARTIES

Re: Application of Chesapeake Operating, Inc. for administrative approval of an unorthodox well location for its PLU Big Sinks 3 25 30 USA No. 1H well in the Bone Spring Pool Section 3, Township 25 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.

Ladies and Gentlemen:

Enclosed is a copy of the above-referenced application which was filed with the New Mexico Oil Conservation Division on this date by Chesapeake Operating Co. for administrative approval of an unorthodox well location for its PLU Big Sinks 3 25 30 USA No. 1H. The proposed wildcat well is to be drilled at a surface location 200 feet from the South line with a projected penetration point 330 feet from the South line and 2130 feet from the East line of Section 3. The bottom-hole location will be 100 feet from the North line and 2130 feet from the East line of Section 3.

As an owner of an interest that may be affected by the proposed well, you may object to this application. Objections must be filed in writing within twenty days from this date at the Division's Santa Fe office that is located at 1220 South Saint Francis Drive, Santa Fe, New Mexico, 87505. If no objection is received within this twenty-day period, this application for an unorthodox well location may be approved.

Sincerely,

A handwritten signature in dark ink, appearing to be 'A.G. Rankin'.

Adam G. Rankin
ATTORNEY FOR CHESAPEAKE OPERATING, INC.

Enclosures

Holland & Hart LLP

Phone [505] 988-4421 Fax [505] 983-6043 www.hollandhart.com

110 North Guadalupe Suite 1 Santa Fe, NM 87501 Mailing Address P.O. Box 2208 Santa Fe, NM 87504-2208

Denver Aspen Boulder Colorado Springs Denver Tech Center Billings Boise Cheyenne Jackson Hole Las Vegas Salt Lake City Santa Fe Washington, D.C.

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CHESAPEAKE, AGENT FOR BOPCO, LP
LEASE NO.:	NMLC61616A
WELL NAME & NO.:	1H PLU BIG SINKS 3 25 30 USA
SURFACE HOLE FOOTAGE:	200' FSL & 2130' FEL
BOTTOM HOLE FOOTAGE:	100' FNL & 2130' FEL
LOCATION:	Section 3, T.25 S., R.30 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☐ **Special Requirements**
- ☐ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - Medium Cave/Karst
 - Logging requirements
 - Waste Material and Fluids
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**