8100 Artesia D-06-02

OCD-~~HOBBS~~

0381

Form 3160-3
(April 2004)

RECEIVED
MAY 23 2006
OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. **NMNM105548**

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☑ REENTER Fed

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. **GARDNER 34 FEDERAL 1** 35934

2. Name of Operator **CHESAPEAKE OPERATING, INC** ATTN: LINDA GOOD 147179

9. API Well No. 30-015-21656

3a. Address **P.O. BOX 18496, OKLAHOMA CITY, OK 73154-0496**

3b. Phone No. *(include area code)* **405-767-4275**

10. Field and Pool, or Exploratory **UND. HORSESHOE BEND; MOR**

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface **2328 FSL 1644 FWL, NESW** SUBJECT TO LIKE APPROVAL BY STATE

At proposed prod. zone **1980 FSL 2180 FEL, NWSE**

11. Sec., T. R. M. or Blk. and Survey or Area **34-23S-25E**

14. Distance in miles and direction from nearest town or post office* **APPROX. 16 MILES SW CARLSBAD, NM**

12. County or Parish Eddy **LEA COUNTY**

13. State **NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
	1280	**320**
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
	11,800	**NM2634**
21. Elevations (Show whether DF, KDB, RT, GL, etc.) **3675 GL 3695 KB**	22. Approximate date work will start*	23. Estimated duration

24. Attachments

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

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

25. Signature	Name *(Printed/Typed)*	Date
	HENRY HOOD	1/4/06

Title **SR. VICE PRESIDENT - LAND & LEGAL**

Approved by *(Signature)* **/s/ Tony J. Herrell**	Name *(Printed/Typed)* **/s/ Tony J. Herrell**	Date
Title **FIELD MANAGER**	Office **CARLSBAD FIELD OFFICE**	MAY 19 2006

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 1 YEAR

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.

**(Instructions on page 2)*

NSL-

CARLSBAD CONTROLLED WATER BASIN

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

#24 Attachment to Application For Permit To Drill or Re-enter

Chesapeake Operating, Inc. proposes to re-enter the Hanagan Horseshoe Bend 1 well and drill to 11,800' to test the Morrow 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.

This location has been resurveyed therefore the footages on the Notice of Staking have changed from 1980 FSL 2180 FEL, NWSE to 2328 FSL 1644 FWL, NESW.

Please find attached the Surface Use Plan and 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.

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.

Archaeological Survey to follow.

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
	78680	Undesignated Horseshoe Bend; Morrow (Gas)

Property Code	Property Name	Well Number
	GARDNER 34 FEDERAL	1

OGRID No.	Operator Name	Elevation
147179	CHESAPEAKE OPERATING, INC.	3677'

Surface Location

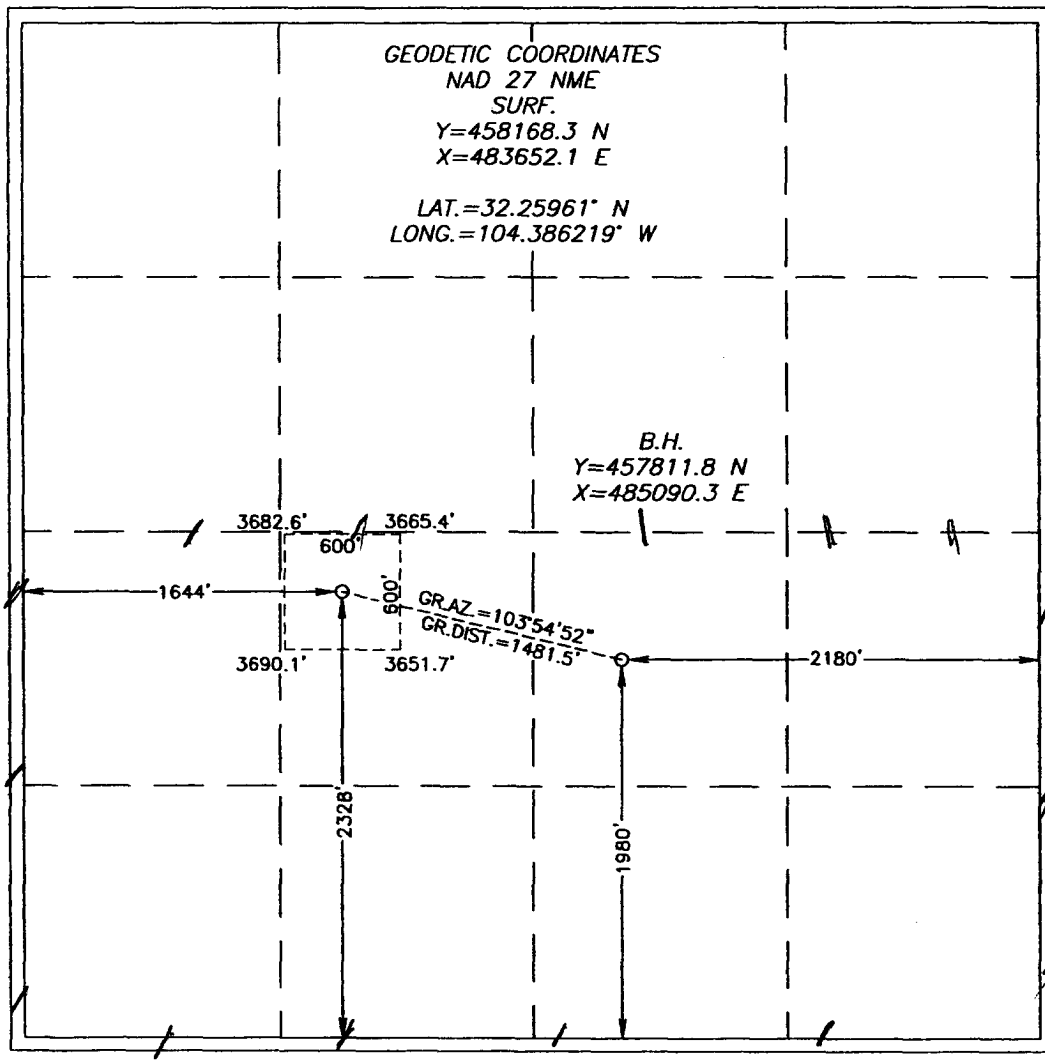
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	34	23-S	25-E		2328	SOUTH	1644	WEST	EDDY

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
J	34	23-S	25-E		1980	SOUTH	2180	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



OPERATOR CERTIFICATION

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

Lynda F. Townsend
Signature

Lynda F. Townsend
Printed Name

Senior Landman
Title

12-22-05
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

NOVEMBER 7, 2005
Date Surveyed JR

Signature & Seal of Professional Surveyor

GARY L. EDSON NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR

12/15/05

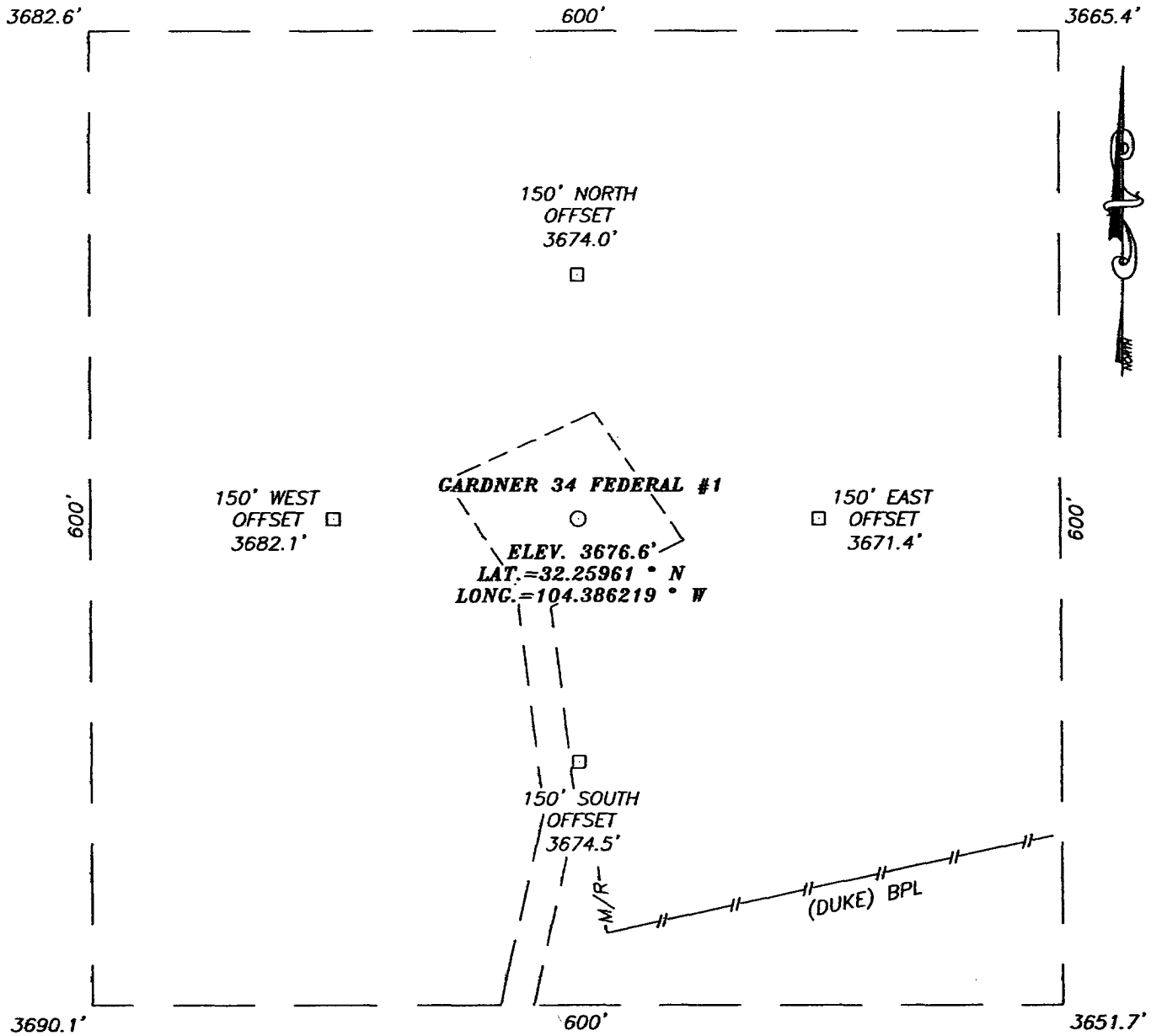
05.11.1881

Certificate No. GARY L. EDSON 12641

EXHIBIT A-1

SECTION 34, TOWNSHIP 23 SOUTH, RANGE 25 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD. #408 (DARK CANYON RD.) AND CO. RD. #672 (HIDALGO RD.) GO WEST ON CO. RD. #408 FOR APPROX. 3.6 MILES. TURN RIGHT (NORTH) AND GO APPROX. 872' TO THIS LOCATION.

100 0 100 200 Feet

Scale: 1"=100'

CHESAPEAKE OPERATING, INC.

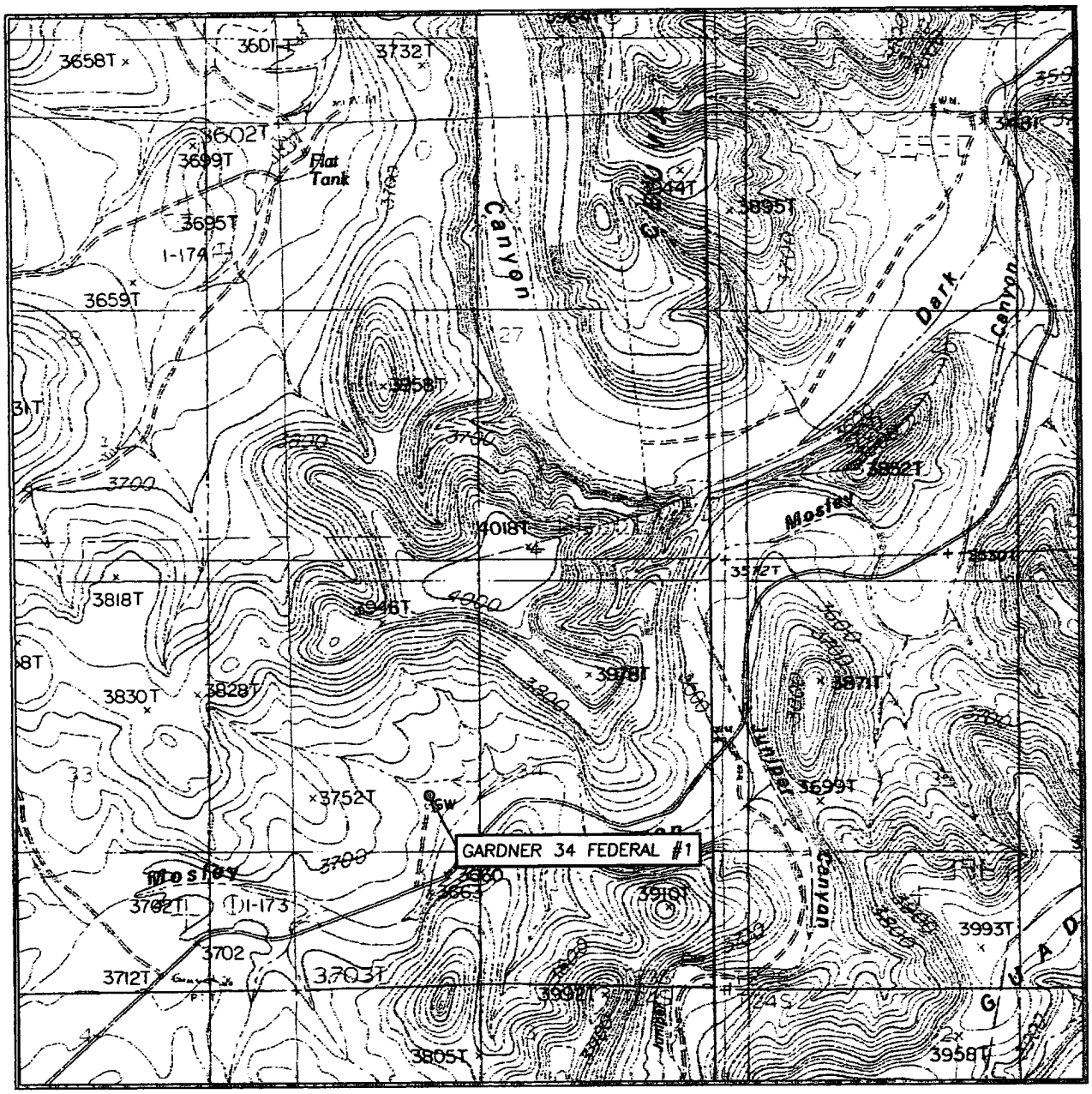
GARDNER 34 FEDERAL #1 WELL
LOCATED 2328 FEET FROM THE SOUTH LINE
AND 1644 FEET FROM THE WEST LINE OF SECTION 34,
TOWNSHIP 23 SOUTH, RANGE 25 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 12/07/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.1881	Dr By: J.R.		Rev 1: N/A
Date: 12/12/05	Disk: CD#5	05111881	Scale: 1"=100'

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

EXHIBIT A-2

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
CARNERO PEAK, N.M. – 20'
KITCHEN COVE, N.M. – 20'

SEC. 34 TWP. 23-S RGE. 25-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 2328' FSL & 1644' FWL

ELEVATION 3677'

OPERATOR CHESAPEAKE OPERATING, INC.

LEASE GARDNER 34 FEDERAL

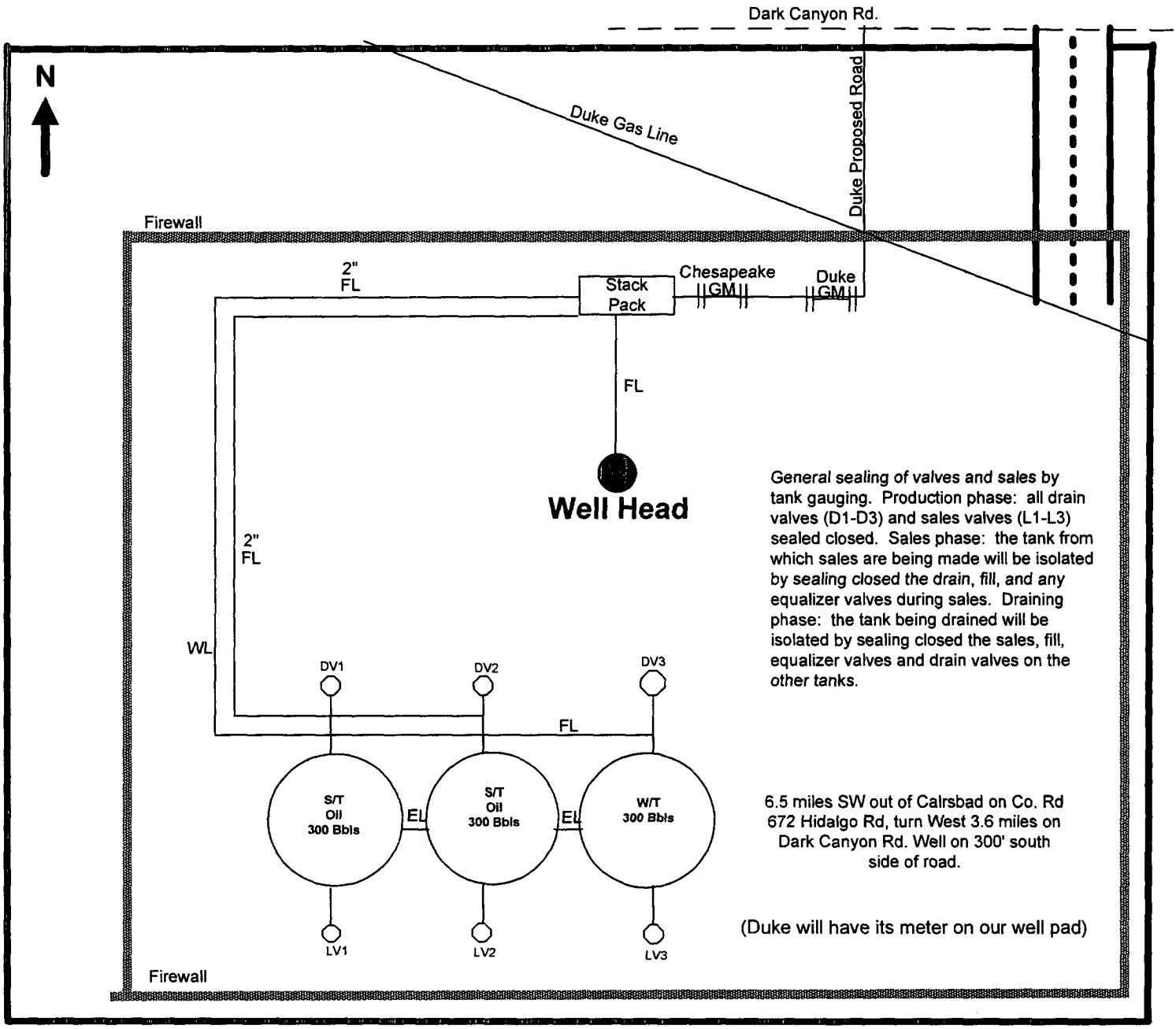
U.S.G.S. TOPOGRAPHIC MAP
CARNERO PEAK, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

EXHIBIT A-4

CHESAPEAKE OPERATING, INC.

GARDNER 34 FEDERAL 1
34-23S-25E
EDDY COUNTY, NEW MEXICO



APPROX. 12 MILES SW OF CARSBAD

GARDNER 34 FEDERAL #1

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

Prepared by: DEBBIE HERNANDEZ
Date: 08-11-2005

Approved by:
Date:

Exhibit C

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

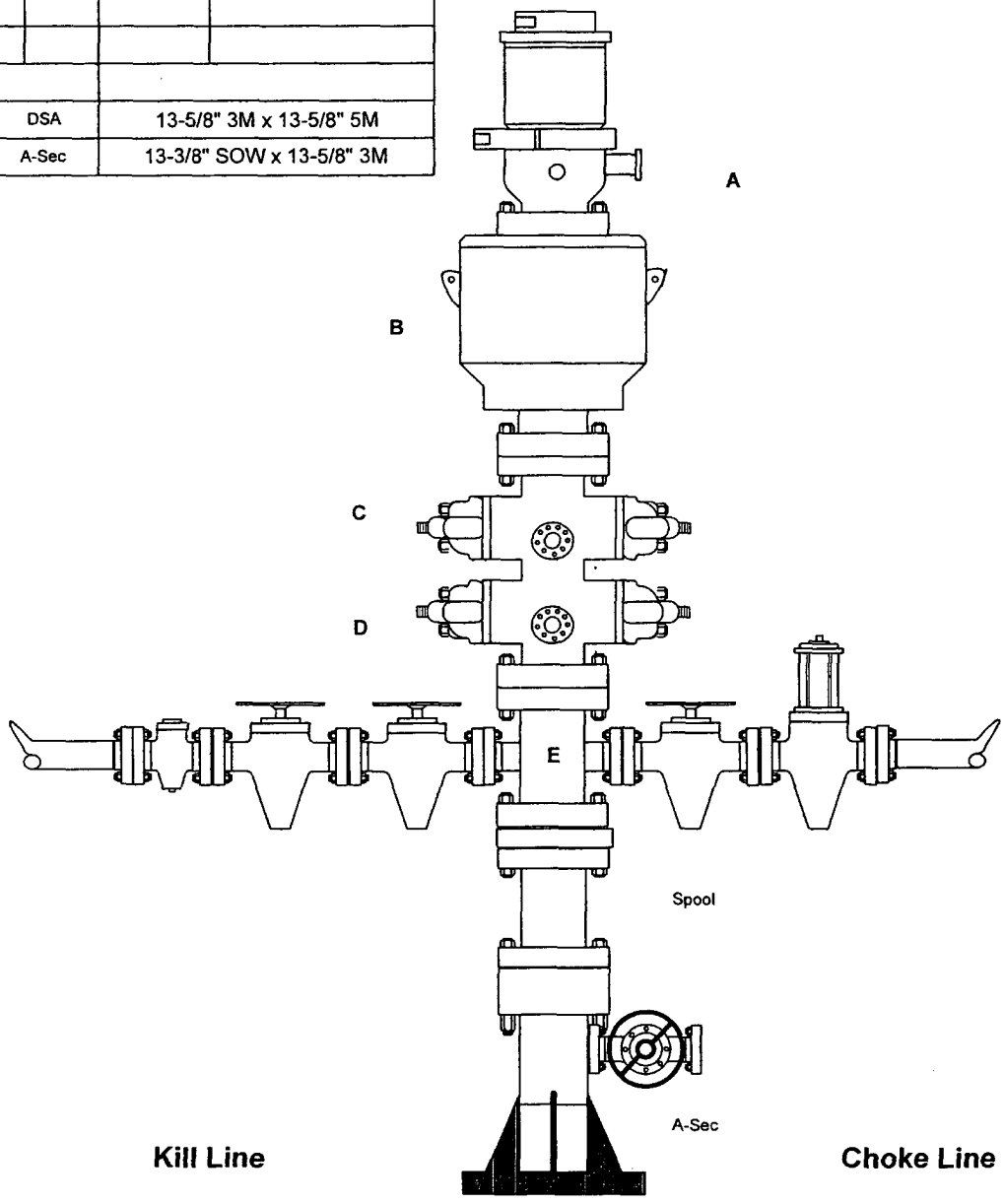
WELL : **Garnder 34 Federal #1**

RIG :

COUNTY : **Eddy** **STATE: New Mexico**

OPERATION: Drill out below 13-3/8" Casing

	SIZE	PRESSURE	DESCRIPTION
A	13-5/8"	500#	Rot Head
B	13-5/8"	5,000#	Annular
C	13-5/8"	5,000#	Pipe Rams
D	13-5/8"	5,000#	Blind Rams
E	13-5/8"	5,000#	Mud Cross
DSA		13-5/8" 3M x 13-5/8" 5M	
A-Sec		13-3/8" SOW x 13-5/8" 3M	



Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	5,000#	Check Valve
2"	5,000#	Gate Valve
2"	5,000#	Gate Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
4"	5,000#	Gate Valve
4"	5,000#	HCR Valve

Exhibit F-1

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

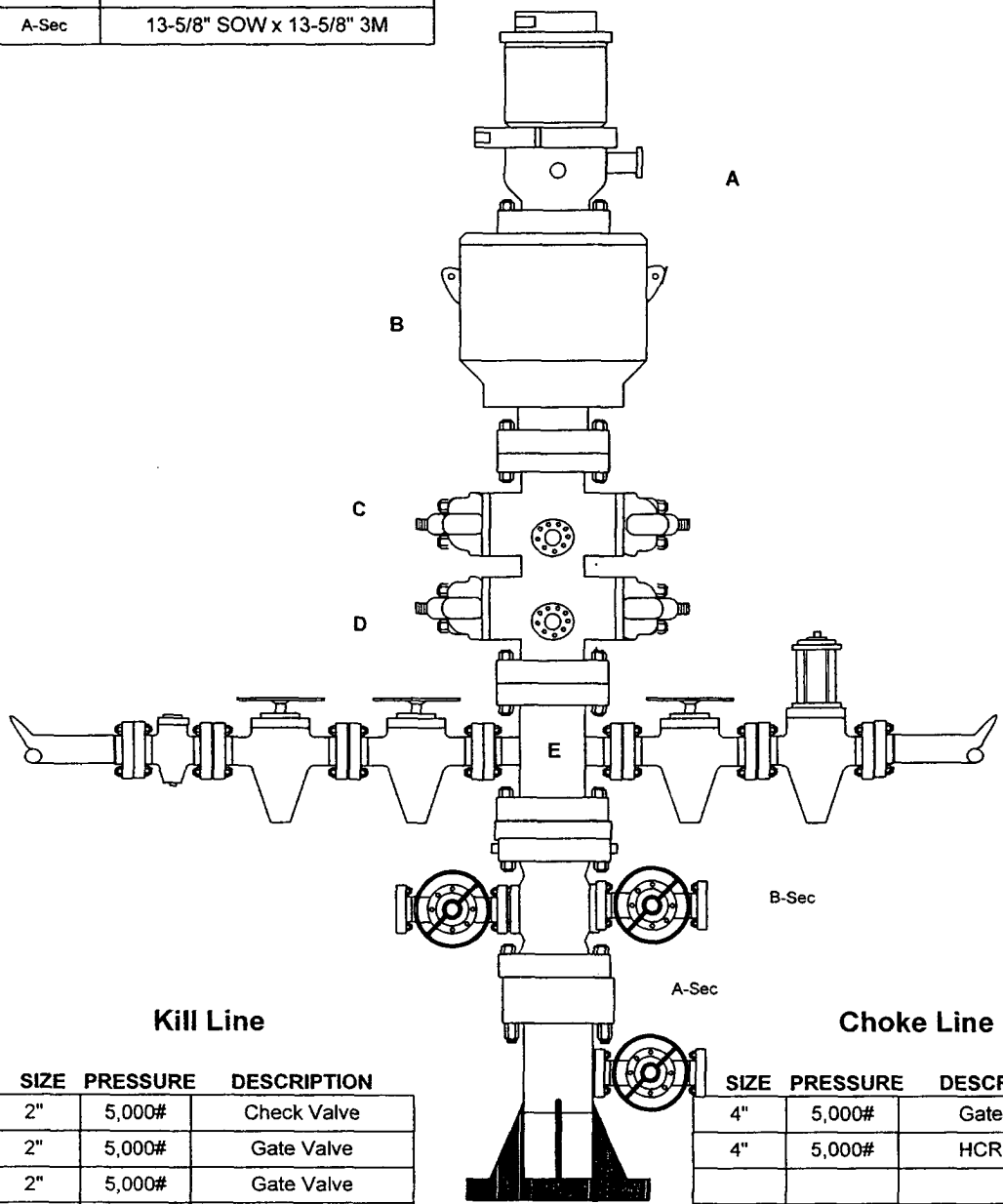
WELL : **Gardner 34 Federal #1**

RIG :

COUNTY : **Eddy** **STATE: New Mexico**

OPERATION: Drill out below 8-5/8" Casing

	SIZE	PRESSURE	DESCRIPTION
A	13-5/8"	500#	Rot Head
B	13-5/8"	5,000#	Annular
C	13-5/8"	5,000#	Pipe Rams
D	13-5/8"	5,000#	Blind Rams
E	13-5/8"	5,000#	Mud Cross
Spool		13-5/8" 5M x 13-5/8" 5M	
B-Sec		13-5/8" 3M x 13-5/8" 5M	
A-Sec		13-5/8" SOW x 13-5/8" 3M	



Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	5,000#	Check Valve
2"	5,000#	Gate Valve
2"	5,000#	Gate Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
4"	5,000#	Gate Valve
4"	5,000#	HCR Valve

Exhibit

Strata Directional Technology, Inc.
Planning Report

Company:	CHESAPEAKE ENERGY CORPORATION	**Date:** 01/03/2006	**Time:** 14:44:01	**Page:**	1
Field:	Eddy County, New Mexico	**Co-ordinate(NE) Reference:**	Site: Gardner "34" Federal, Grid North		
Site:	Gardner "34" Federal	**Vertical (TVD) Reference:**	GL 3675' + RKB 20' 3695.0		
Well:	#1	**Section (VS) Reference:**	Well (0.00N,0.00E,102.82Azi)		
Wellpath:	Original Hole	**Plan:**	Plan #1		

Field: Eddy County, New Mexico

Map System: | **Map Zone:**
Geo Datum: | **Coordinate System:** Site Centre
Sys Datum: Mean Sea Level | **Geomagnetic Model:** igrf2005

Site: Gardner "34" Federal
1650' FWL, 2310' FSL
Sec 34, T23S, R25E

Site Position: | **Northing:** ft | **Latitude:**
From: Local Only | **Easting:** ft | **Longitude:**
Position Uncertainty: 0.00 ft | **North Reference:** Grid
Ground Level: 3675.00 ft | **Grid Convergence:** deg

Well: #1 | **Slot Name:**

Well Position: +N/-S 0.00 ft | **Northing:** ft | **Latitude:**
+E/-W 0.00 ft | **Easting :** ft | **Longitude:**
Position Uncertainty: 0.00 ft

Wellpath: Original Hole | **Drilled From:** Surface
Tie-on Depth: 0.00 ft
Current Datum: GL 3675' + RKB 20' | **Height** 3695.00 ft | **Above System Datum:** Mean Sea Level
Magnetic Data: 01/03/2006 | **Declination:** -6.58 deg
Field Strength: 31526 nT | **Mag Dip Angle:** -28.63 deg

Vertical Section: Depth From (TVD) ft	+N/-S ft	+E/-W ft	Direction deg
11800.00	0.00	0.00	102.82

Plan: Plan #1 | **Date Composed:** 01/03/2006
Version: 1
Principal: No | **Tied-to:** From Surface

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	102.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2440.00	0.00	102.82	2440.00	0.00	0.00	0.00	0.00	0.00	102.82	
4034.41	15.94	102.82	4013.91	-48.91	214.92	1.00	1.00	0.00	102.82	
7843.11	15.94	102.82	7676.09	-281.09	1235.08	0.00	0.00	0.00	0.00	
9437.52	0.00	102.82	9250.00	-330.00	1450.00	1.00	-1.00	0.00	180.00	
11987.52	0.00	102.82	11800.00	-330.00	1450.00	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2440.00	0.00	102.82	2440.00	0.00	0.00	0.00	0.00	0.00	0.00	9 5/8" Est. Window
2500.00	0.60	102.82	2500.00	-0.07	0.31	0.31	1.00	1.00	0.00	
2600.00	1.60	102.82	2599.98	-0.50	2.18	2.23	1.00	1.00	0.00	
2700.00	2.60	102.82	2699.91	-1.31	5.75	5.90	1.00	1.00	0.00	
2800.00	3.60	102.82	2799.76	-2.51	11.02	11.31	1.00	1.00	0.00	
2900.00	4.60	102.82	2899.51	-4.10	18.00	18.46	1.00	1.00	0.00	
3000.00	5.60	102.82	2999.11	-6.07	26.66	27.34	1.00	1.00	0.00	
3100.00	6.60	102.82	3098.54	-8.43	37.02	37.97	1.00	1.00	0.00	
3200.00	7.60	102.82	3197.77	-11.17	49.08	50.33	1.00	1.00	0.00	
3300.00	8.60	102.82	3296.77	-14.30	62.81	64.42	1.00	1.00	0.00	
3400.00	9.60	102.82	3395.51	-17.81	78.24	80.24	1.00	1.00	0.00	
3500.00	10.60	102.82	3493.96	-21.70	95.34	97.77	1.00	1.00	0.00	
3600.00	11.60	102.82	3592.09	-25.97	114.11	117.03	1.00	1.00	0.00	
3700.00	12.60	102.82	3689.87	-30.62	134.55	137.99	1.00	1.00	0.00	
3800.00	13.60	102.82	3787.27	-35.65	156.65	160.65	1.00	1.00	0.00	

Strata Directional Technology, Inc.
Planning Report

Company:	CHESAPEAKE ENERGY CORPORATION	**Date:** 01/03/2006	**Time:** 14:44:01	**Page:**	2
Field:	Eddy County, New Mexico	**Co-ordinate(NE) Reference:**	Site: Gardner "34" Federal, Grid North		
Site:	Gardner "34" Federal	**Vertical (TVD) Reference:**	GL 3675' + RKB 20' 3695.0		
Well:	#1	**Section (VS) Reference:**	Well (0.00N,0.00E,102.82Azi)		
Wellpath:	Original Hole	**Plan:**	Plan #1		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
3900.00	14.60	102.82	3884.25	-41.06	180.40	185.01	1.00	1.00	0.00	
4000.00	15.60	102.82	3980.80	-46.84	205.80	211.06	1.00	1.00	0.00	
4034.41	15.94	102.82	4013.91	-48.91	214.92	220.42	1.00	1.00	0.00	
4100.00	15.94	102.82	4076.98	-52.91	232.49	238.43	0.00	0.00	0.00	
4200.00	15.94	102.82	4173.13	-59.01	259.27	265.90	0.00	0.00	0.00	
4300.00	15.94	102.82	4269.28	-65.10	286.06	293.37	0.00	0.00	0.00	
4400.00	15.94	102.82	4365.44	-71.20	312.84	320.84	0.00	0.00	0.00	
4500.00	15.94	102.82	4461.59	-77.29	339.63	348.31	0.00	0.00	0.00	
4600.00	15.94	102.82	4557.74	-83.39	366.41	375.78	0.00	0.00	0.00	
4700.00	15.94	102.82	4653.90	-89.49	393.20	403.25	0.00	0.00	0.00	
4800.00	15.94	102.82	4750.05	-95.58	419.98	430.72	0.00	0.00	0.00	
4900.00	15.94	102.82	4846.20	-101.68	446.77	458.19	0.00	0.00	0.00	
5000.00	15.94	102.82	4942.36	-107.77	473.55	485.66	0.00	0.00	0.00	
5100.00	15.94	102.82	5038.51	-113.87	500.34	513.13	0.00	0.00	0.00	
5200.00	15.94	102.82	5134.66	-119.97	527.12	540.60	0.00	0.00	0.00	
5300.00	15.94	102.82	5230.81	-126.06	553.91	568.07	0.00	0.00	0.00	
5400.00	15.94	102.82	5326.97	-132.16	580.69	595.54	0.00	0.00	0.00	
5500.00	15.94	102.82	5423.12	-138.25	607.48	623.01	0.00	0.00	0.00	
5600.00	15.94	102.82	5519.27	-144.35	634.26	650.48	0.00	0.00	0.00	
5700.00	15.94	102.82	5615.43	-150.45	661.05	677.95	0.00	0.00	0.00	
5800.00	15.94	102.82	5711.58	-156.54	687.83	705.42	0.00	0.00	0.00	
5900.00	15.94	102.82	5807.73	-162.64	714.62	732.89	0.00	0.00	0.00	
6000.00	15.94	102.82	5903.89	-168.73	741.40	760.36	0.00	0.00	0.00	
6100.00	15.94	102.82	6000.04	-174.83	768.19	787.83	0.00	0.00	0.00	
6200.00	15.94	102.82	6096.19	-180.93	794.97	815.30	0.00	0.00	0.00	
6300.00	15.94	102.82	6192.34	-187.02	821.76	842.77	0.00	0.00	0.00	
6400.00	15.94	102.82	6288.50	-193.12	848.54	870.24	0.00	0.00	0.00	
6500.00	15.94	102.82	6384.65	-199.21	875.33	897.71	0.00	0.00	0.00	
6600.00	15.94	102.82	6480.80	-205.31	902.11	925.18	0.00	0.00	0.00	
6700.00	15.94	102.82	6576.96	-211.40	928.90	952.65	0.00	0.00	0.00	
6800.00	15.94	102.82	6673.11	-217.50	955.68	980.12	0.00	0.00	0.00	
6900.00	15.94	102.82	6769.26	-223.60	982.47	1007.59	0.00	0.00	0.00	
7000.00	15.94	102.82	6865.42	-229.69	1009.25	1035.06	0.00	0.00	0.00	
7100.00	15.94	102.82	6961.57	-235.79	1036.04	1062.53	0.00	0.00	0.00	
7200.00	15.94	102.82	7057.72	-241.88	1062.82	1090.00	0.00	0.00	0.00	
7300.00	15.94	102.82	7153.87	-247.98	1089.61	1117.47	0.00	0.00	0.00	
7400.00	15.94	102.82	7250.03	-254.08	1116.39	1144.94	0.00	0.00	0.00	
7500.00	15.94	102.82	7346.18	-260.17	1143.18	1172.41	0.00	0.00	0.00	
7600.00	15.94	102.82	7442.33	-266.27	1169.96	1199.88	0.00	0.00	0.00	
7700.00	15.94	102.82	7538.49	-272.36	1196.75	1227.35	0.00	0.00	0.00	
7800.00	15.94	102.82	7634.64	-278.46	1223.53	1254.82	0.00	0.00	0.00	
7843.11	15.94	102.82	7676.09	-281.09	1235.08	1266.66	0.00	0.00	0.00	
7900.00	15.38	102.82	7730.87	-284.49	1250.05	1282.02	1.00	-1.00	0.00	
8000.00	14.38	102.82	7827.52	-290.19	1275.08	1307.69	1.00	-1.00	0.00	
8100.00	13.38	102.82	7924.60	-295.51	1298.47	1331.67	1.00	-1.00	0.00	
8200.00	12.38	102.82	8022.08	-300.46	1320.19	1353.95	1.00	-1.00	0.00	
8300.00	11.38	102.82	8119.94	-305.02	1340.26	1374.53	1.00	-1.00	0.00	
8400.00	10.38	102.82	8218.14	-309.21	1358.65	1393.40	1.00	-1.00	0.00	
8500.00	9.38	102.82	8316.66	-313.02	1375.38	1410.55	1.00	-1.00	0.00	
8600.00	8.38	102.82	8415.46	-316.44	1390.42	1425.97	1.00	-1.00	0.00	
8700.00	7.38	102.82	8514.52	-319.48	1403.78	1439.68	1.00	-1.00	0.00	
8800.00	6.38	102.82	8613.80	-322.14	1415.45	1451.65	1.00	-1.00	0.00	
8900.00	5.38	102.82	8713.27	-324.41	1425.43	1461.88	1.00	-1.00	0.00	
9000.00	4.38	102.82	8812.91	-326.29	1433.72	1470.38	1.00	-1.00	0.00	

Strata Directional Technology, Inc.
Planning Report

Company:	CHESAPEAKE ENERGY CORPORATION	**Date:** 01/03/2006	**Time:** 14:44:01	**Page:**	3
Field:	Eddy County, New Mexico	**Co-ordinate(NE) Reference:**	Site: Gardner "34" Federal, Grid North		
Site:	Gardner "34" Federal	**Vertical (TVD) Reference:**	GL 3675' + RKB 20' 3695.0		
Well:	#1	**Section (VS) Reference:**	Well (0.00N,0.00E,102.82Azi)		
Wellpath:	Original Hole	**Plan:**	Plan #1		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
9100.00	3.38	102.82	8912.68	-327.79	1440.31	1477.14	1.00	-1.00	0.00	
9200.00	2.38	102.82	9012.55	-328.91	1445.20	1482.16	1.00	-1.00	0.00	
9300.00	1.38	102.82	9112.50	-329.63	1448.39	1485.43	1.00	-1.00	0.00	
9400.00	0.38	102.82	9212.48	-329.97	1449.88	1486.95	1.00	-1.00	0.00	
9437.52	0.00	102.82	9250.00	-330.00	1450.00	1487.08	1.00	-1.00	0.00	
9500.00	0.00	102.82	9312.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
9600.00	0.00	102.82	9412.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
9700.00	0.00	102.82	9512.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
9800.00	0.00	102.82	9612.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
9900.00	0.00	102.82	9712.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
10000.00	0.00	102.82	9812.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
10100.00	0.00	102.82	9912.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
10200.00	0.00	102.82	10012.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
10300.00	0.00	102.82	10112.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
10400.00	0.00	102.82	10212.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
10500.00	0.00	102.82	10312.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
10600.00	0.00	102.82	10412.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
10700.00	0.00	102.82	10512.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
10800.00	0.00	102.82	10612.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
10900.00	0.00	102.82	10712.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11000.00	0.00	102.82	10812.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11100.00	0.00	102.82	10912.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11200.00	0.00	102.82	11012.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11300.00	0.00	102.82	11112.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11400.00	0.00	102.82	11212.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11500.00	0.00	102.82	11312.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11600.00	0.00	102.82	11412.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11700.00	0.00	102.82	11512.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11800.00	0.00	102.82	11612.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11900.00	0.00	102.82	11712.48	-330.00	1450.00	1487.08	0.00	0.00	0.00	
11987.52	0.00	102.82	11800.00	-330.00	1450.00	1487.08	0.00	0.00	0.00	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<— Latitude —> Deg Min Sec	<— Longitude —> Deg Min Sec
Surface			0.00	0.00	0.00				
PBHL -Plan hit target			11800.00	-330.00	1450.00				

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
600.00	600.00	13.375	17.500	13 3/8"
2440.00	2440.00	9.625	12.250	9 5/8" Est. Window
11987.52	11800.00	5.500	6.500	5 1/2"

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

1. EXISTING ROADS

   a. Existing county and lease 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. The access road is approximately 50'–60' 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. No turnouts are expected.
   b. In order to level the location, cut and fill will be required. Please see attached Well Location and Acreage Dedication Plat – Exhibit A1-A4.
   c. A locking gate will be installed at the site entrance.
   d. Any fences cut will be repaired. Cattle guards will be installed, if needed.
   e. 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.
   f. Driving directions are from the intersection of Co. Rd. #408 (Dark Canyon Rd.) and Co. Rd. #672 (Hidalgo Rd.) Go West on Co. Rd #408 for approx. 3.6 miles. Turn Right (North) and go approx. 872' to this location.

3. LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS OF THE PROPOSED LOCATION – see Exhibit B.

4. LOCATION OF PRODUCTION FACILITIES

   It is anticipated that production facilities will be on location as product will be sold at the wellhead and/or tank battery. Duke Energy has a pipe line with another company's meter at the edge of our location. – 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.

6. CONSTRUCTION MATERIALS
No construction materials will be used from Section 34-23S-25E. All material (i.e. shale) will be acquired from private or commercial sources.

7. METHODS FOR HANDLING WASTE DISPOSAL
A steel pit (close loop system) will be utilized during the drilling of this well. 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-toliet and then hauled to an approved sanitary landfill.

8. ANCILLARY FACILITIES
None

9. WELLSITE LAYOUT
The proposed site layout plat is attached showing rig orientation and equipment location. See Exhibit D. Also see Exhibit A for the size of the pad.

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.

11. SURFACE & MINERAL OWNERSHIP
United States of America
Department of Interior
Bureau of Land Management

GRAZING LESSEE:
Ridley Gardner
905 Dark Canyon Rd
Carlsbad, NM 88220
505-885-3280
(Chesapeake Operating, Inc. has an agreement with the grazing lessee)

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.

Chesapeake Operating, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

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)
rjones@chkenergy.com

Drilling Engineer
David DeLaO
P.O. Box 14896
Oklahoma City, OK 73154
(405) 767-4339 (OFFICE)
(405) 879-9573 (FAX)
(405) 990-8182 (MOBILE)
ddelao@chkenergy.com

Cecil Gutierrez
Sr. Landman
P.O. Box 11050
Midland, TX 79705
432-687-2992 (OFFICE)
432-687-3675 (FAX)
cgutierrez@chkenergy.com

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

Regulatory Compliance
Linda Good
Regulatory Compliance Analyst
P.O. Box 18496
Oklahoma City, OK 73154
(405) 767-4275 (OFFICE)
(405) 879-9583 (FAX)
lgood@chkenergy.com

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.

By: _____

Date: 1/4/06

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

The estimated tops of important geologic markers are as follows:

Formation	Subsea	Depth
CHERRY CANYON	1157	2538
BRUSHY CANYON	120	3600
LOWER BRUSHY CANYON PAY	-1360	5105
BONE SPRING	-1560	5310
FIRST BONE SPRING	-2125	5890
SECOND BONE SPRING	-2415	6205
THIRD BONE SPRING	-4255	8070
WOLFCAMP	-4560	8385
BASE WOLFCAMP	-5380	9225
UPPER PENN SHALE	-5530	9385
CANYON MARKER	-5855	9725
UPPER STRAWN	-6050	9920
STRAWN	-6110	9980
LOWER STRAWN	-6520	10390
ATOKA	-6700	10570
ATOKA LIME	-6775	10645
UPPER MORROW SAND	-7285	11155
MORROW CLASTIC	-7315	11185
MORROW B SAND	-7365	11235
MORROW C SAND	-7420	11290
MORROW D SAND	-7480	11350
LOWER MORROW	-7675	11545
BARNETT	-7750	11620
TD		**11800**

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
Oil/Gas	Strawn	9920 to 10200
Oil/Gas	Morrow	11150 to 11620

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
7. the rated working pressure.
8. A record of all pressures will be made on a pressure-recording chart.

D. Test Duration

1. In each case, the individual components should be monitored for leaks for **5 minutes,** 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, **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:
3.

System Operating Pressures	Precharge Pressure
1500 PSI	750 PSI
2000 PSI	1,000 PSI
3000 PSI	1,000 PSI

3. Closing times for the Hydril 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 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 **full open** or **full closed** position. **Do not leave in neutral position**.

4. CASING AND CEMENTING PROGRAM

a. The proposed casing program will be as follows:

Purpose	Interval	Hole Size	Casing Size	Weight	Grade	Thread	Condition
Production	0' – 11,840'	8-3/4	5-1/2	17#	L-80	LT&C	New

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

Interval	Type	Amount	Yield	Washout	Excess
1,700' – 11,840'	50:50 Poz:H (Lead)	900 sks	2.38	10%	25%
	50:50 Poz:H (Tail)	200 sks	1.22	10%	25%

5. MUD PROGRAM

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

Interval	Mud Type	Mud Weight	Viscosity	Fluid Loss
2,440' – 9,500'	FW/Cut Brine	8.4-9.5	28-29	N/C
9,500' - 11,350'	Brine/XCD	9.5-10.5	34-40	10-8

A steel pit (close loop system) will be utilized during the drilling of this well. 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.

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 6,300 psi. No abnormal pressures or temperatures are anticipated.
   b. Hydrogen sulfide gas is not anticipated.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	**Chesapeake Operating, Inc.**
Well Name & No.	**Gardner 34 Federal #1 – Re-entry**
SH Location:	**2328' FSL, 1644' FWL, Section 34, T. 23 S., R. 25 E., Eddy County, New Mexico**
BH Location:	**1980' FSL, 2180' FEL, Section 34, T. 23 S., R. 25 E., Eddy County, New Mexico**
Lease:	**NM-110343**

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

   A. Well spud

   B. Cementing casing **5-1/2** inch

   Note: 16" surface casing and 9-5/8" intermediate casing in place.

   C. BOP tests

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.

4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The **16** inch surface casing is set at 290' with cement circulated to the surface.

2. The **9-5/8** inch intermediate casing is set at 2300 feet with cement circulated to the surface.

3. The **5-1/2** inch production casing was set at 11,356 feet with 400 sx cement. When the well was plugged, the 5-1/2 inch casing was shot off at 9883 feet and pulled.

4. The minimum required fill of cement behind the new **5-1/2** inch production casing is **to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.** .

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the **9-5/8** inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **5000** psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.

- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE shall be tested before drilling into the Wolfcamp formation.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

1/25/2006
acs