

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO 1004-0137
Expires March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☐ Oil Well ☐ Gas Well ☐ Dry ☒ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resrv.,
Other: SALT WATER DISPOSAL

5. Lease Serial No
NMNM-093203

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No

2. Name of Operator
CHESAPEAKE OPERATING, INC.

ATTN: LINDA GOOD

8. Lease Name and Well No
Globe 14 Federal 13. Address P.O. BOX 18496
OKLAHOMA CITY, OK 73154-04963a. Phone No. (include area code)
405-767-42759. AFI Well No
30-015-34755

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

2280 FNL & 1980 FEL, SWNE, SECTION 14, T16S, R30E

At surface

2130 FNL & 1830 FEL, SWNE, SEC 14-T16S-R30E

At top prod. interval reported below

At total depth 2130 FNL & 1830 FEL, SWNE, SEC 14-T16S-R30E

AUG 23 2007
OCD-ARTESIA10. Field and Pool or Exploratory
Henshaw11. Sec., T., R., M., on Block and
Survey or Area 14-16S-30E

12. County or Parish

EDDY COUNTY

13. State

NM

14. Date Spudded
11/25/200615. Date T.D. Reached
02/15/200716. Date Completed 05/09/2007
☒ D & A ☐ Ready to Prod17. Elevations (DF, RKB, RT, GL)*
3845 GR / 3859 DF / 3860 KB18. Total Depth MD 9100'
TVD19. Plug Back T.D. MD
TVD20. Depth Bridge Plug Set MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

DLL/MGRD CSL DSN/SDL/CSNG LSS/FWS

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit report)
Directional Survey? ☐ No ☒ Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cement Depth	No. of Sk. & Type of Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
17 1/2	13 3/8	48#	0	520'		650 Class C		Surface	
11	8 5/8	32#	0	3000'		650 Class C		121'	
7 7/8	5 1/2	17#	0	9100'		1000 H		2500' Calc	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 7/8"	3499'							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No Holes	Perf Status
A)			8771' - 8911'		70	CIBP @ 8760
B)			8646' - 8736'		79	CBP @ 8600
C)			7697' - 7800'		100	CIBP @ 7660
D)			3660' - 3708'		76	

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
8771' - 8911'	Spot 200 gal 15% NeFe, Acid w/2850 gal 15% NeFe + 110 BS
8646' - 8736'	Acid w/2800 gal 15% NeFe + 110 BS, flush w/53 bbl 2% KCL. Re-acid w/10,000 gal 20% Ultragel, flush w/79 bbl 2% Sik Wtr
7697' - 7800'	Spot 200 gal 15% NeFe, Acidize Upper Wolfcamp w/additional 3300 gal 15% NeFe + 110 BS
3660' - 3708'	Spot 200 gal 15% NeFe, Acidize San Andres w/additional 2800 gal 15% NeFe + 90 BS, flush w/2% KCL wtr (NEXT PAGE)

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
NONE			→						NONE
Choke Size	Tbg Press Flwg SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press Flwg SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

*(See instructions and spaces for additional data on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

ACCEPTED FOR RECORD

AUG 21 2007

FREDERICK WRIGHT
PETROLEUM ENGINEER

28b Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

28c Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

NONE

30 Summary of Porous Zones (Include Aquifers)

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc	Name	Top
					Meas. Depth
	0' 2981'	2981' 7691'	Sand, Salt and Anhydrite w/some Dolomite and Shale. Dolomite w/some Sand, Chert and Shale.	Yates Seven Rivers	1454' 1698'
	7691'	TD	Limestone w/some Chert and Shale	Queen San Andres	2248' 2981'
				Gloneta Tubb	4475' 5710'
				Abo Wolfcamp	6379' 7691'
				TD	9100'

32 Additional remarks (include plugging procedure):

#27 Cont'd.

(3660' - 3708' San Andres) re-acid w/5000 gal 15% HCL.

33 Indicate which items have been attached by placing a check in the appropriate boxes

- ☒ Electrical/Mechanical Logs (1 full set req'd)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other

34 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) LINDA GOOD

Title REGULATORY ANALYST

Signature

Linda Good

Date 06/07/2007

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 3)

(Form 3160-4, page 2)

OPERATOR
WELL/LEASE
COUNTY

CHESAPEAKE OPERATIONS
GLOBE 14 FED. COM. 1
EDDY CO., NM

504-5049

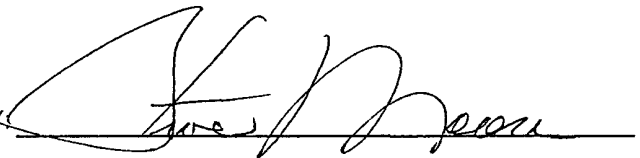
STATE OF NEW MEXICO
DEVIATION REPORT

264	1.50
472	1.00
525	1.00
1,035	1.50
1,480	1.50
1,957	0.75
2,497	0.75
3,000	0.75

STATE OF TEXAS

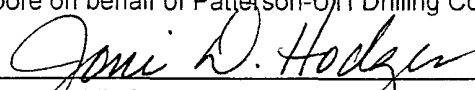
COUNTY OF MIDLAND

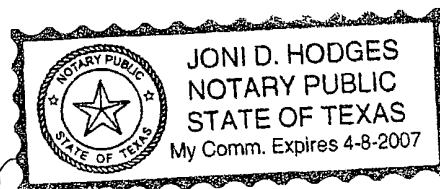
BY



The foregoing instrument was acknowledged before me on
Moore on behalf of Patterson-UTL Drilling Company LP, LLLP.

January 9, 2007, by Steve


Notary Public for Midland County, Texas
My Commission Expires: 4/08/07



REC'D JAN 22 2007

End of Well Recap FOR

**Chesapeake
Globe 14 Federal 1
Eddy County, New Mexico**

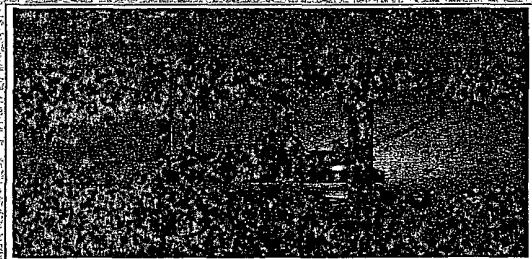
Proposal No. 1201061234

Presented By

Dominic Herrald
Account Manager

Danny Ward
Vice President of Operations

Jeremy Burnett
Well Planner



OUNTUM
DRILLING MOTORS



Overlay Well & Survey Report

Company Name: Chesapeake Operating
 Location: (NM27E) Eddy County
 Well name: Globe 14 Federal # 1
 Rig Name:
 Report Date: Thursday, December 07, 2006
 State/Province : New Mexico
 Job Number: Globe 14 Federal # 1

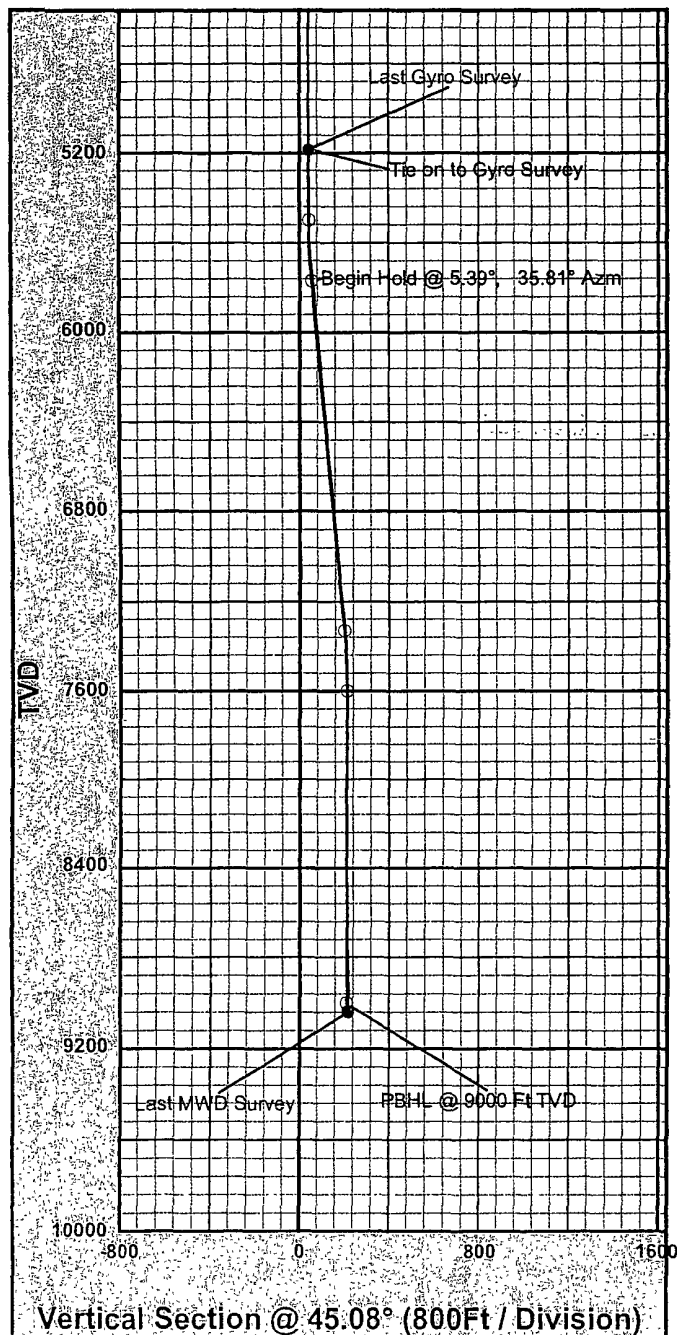
Critical Points for Globe 14 Federal #1- Tie on Plan 12-07-06

MD Ft	INC Deg	Azm Deg	TVD Ft	NS Ft	EW Ft	VS Ft	DLS	Comments
5187.00	0.06	291.20	5186.41	9.12	49.12	41.22		Tie on to Gyro Survey
5500.00	0.06	290.38	5499.41	9.23	48.81	41.09	0.00	KOP - Build and Turn @ 5500MD, 2.00°/ 100 Ft
5770.08	5.39	35.81	5769.10	19.57	56.10	53.54	1.99	Begin Hold @ 5.39°, 35.81° Azm
7339.04	5.39	35.81	7331.13	138.99	142.26	198.87	0.00	Begin Drop @ -2.00°/ 100 Ft
7608.31	0.00	0.00	7600.00	149.24	149.66	211.35	2.00	Begin Hold @ 0.00°, 0.00° Azm
9008.31	0.00	0.00	9000.00	149.24	149.66	211.35	0.00	PBHL @ 9000 Ft TVD

MAGNETICS	GEODETICS
Decl. Date: Thursday, December 07, 2006 Declination: 8.34°E → TN = MN + 8.34 : Magnetic to True Convergence: 0.21°E → GN = TN - 0.21 : True to Grid Total Correction: 8.13°E → GN = MN + 8.13 : Magnetic to Grid Latitude: 32° 55' 20.8146" N Longitude: -103° 56' 23.5916" W Field Strength: 49494(nT) Max Dip Angle: 60.84° Bx, By, Bz (nT): Bx=23830, By=3494, Bz=43239	Grid System: NM-27E Datum: NAD27 Group: US-SPC27 Unit: USFEET Surface Location: X= 620730.00, Y=699523.90 Latitude: 32° 55' 20.8146" N Longitude: -103° 56' 23.5916" W Convergence: 0.21°E Scale Factor: 0.9999



True North



SURFACE LOCATION

Datum Reference: , RKB:'

Y=699523.90'

X=620730.00'

PBHL @ 9000' TVD

211.35' @ 45.08°

N:149.24' E:149.66'

Y=699673.70'

X=620879.10'

TGT Globe 14 Federal # 1 - PBHL @ 7600.00' TVD

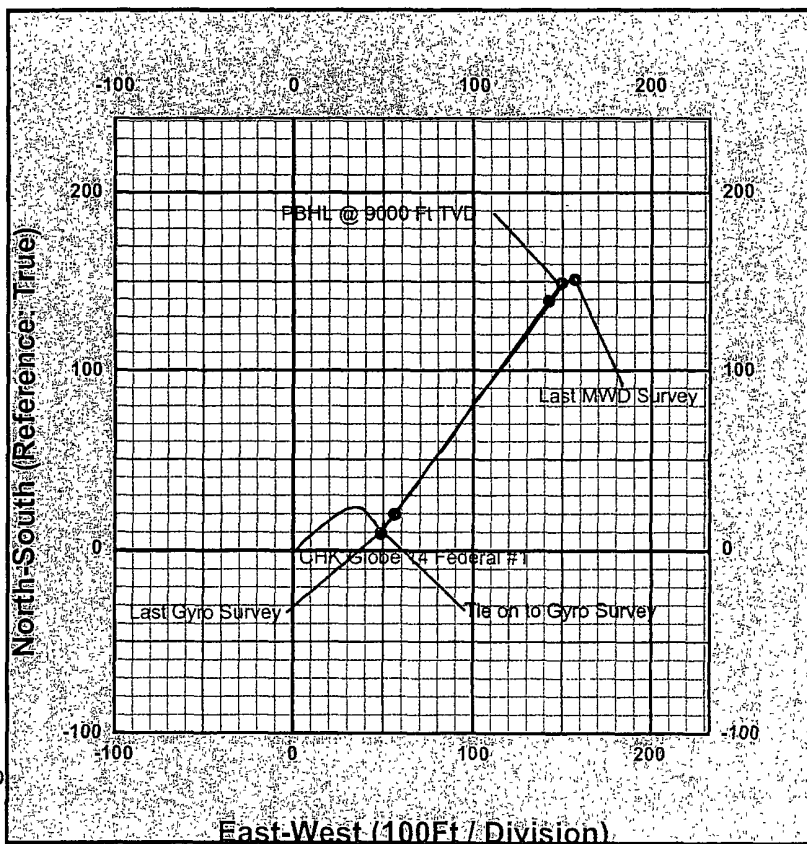
211.35' @ 45.08°

N:149.24' E:149.66'

Y=699673.70'

X=620879.10'

Distance to Proposal -> 0.8 Ft



Job Number: Globe 14 Federal # 1
 Company: Chesapeake Operating
 Lease/Well: Globe 14 Federal # 1
 Location: (NM27E) Eddy County
 Rig Name:
 RKB: 0.00 Ft
 Vertical Datum:

State/Country:
 Declination:
 Grid:
 Project name: Eddy County
 Date/Time: 20-Dec-06 / 11:01
 Well Name:
 North Reference: True North
 Convergence: 0.2138°

WinSURV3D SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 45.08°
Vertical Section Referenced to Wellhead
Local Coordinates Referenced to Wellhead

Direction referenced to True North

Measured Depth Ft	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	LOCALS		Vertical Section Ft	CLOSURE		Dogleg Severity Deg/100
				N-S Ft	E-W Ft		Distance Ft	Direction Deg	
5187.00	0.06	290.38	5186.41	9.12	49.12	41.22	49.96	79.48	0.00
5418.00	0.40	262.30	5417.41	9.05	48.21	40.53	49.05	79.36	0.15
5450.00	0.30	257.50	5449.41	9.02	48.02	40.37	48.86	79.36	0.33
5513.00	1.20	22.50	5512.40	9.59	48.11	40.84	49.05	78.72	2.21
5545.00	2.10	34.10	5544.39	10.39	48.56	41.72	49.66	77.92	2.99
5577.00	3.00	39.90	5576.36	11.52	49.43	43.13	50.75	76.88	2.92
5609.00	3.80	39.10	5608.30	12.98	50.64	45.02	52.27	75.62	2.50
5641.00	4.50	39.10	5640.22	14.78	52.10	47.33	54.15	74.16	2.19
5672.00	4.50	37.80	5671.12	16.68	53.61	49.74	56.14	72.71	0.33
5704.00	4.40	36.70	5703.02	18.66	55.11	52.20	58.18	71.29	0.41
5736.00	4.90	37.80	5734.92	20.73	56.68	54.77	60.35	69.92	1.59
5768.00	5.50	38.40	5766.79	23.01	58.47	57.65	62.84	68.52	1.88
5832.00	5.40	38.70	5830.50	27.76	62.26	63.69	68.17	65.97	0.16
5894.00	5.80	35.10	5892.20	32.60	65.89	69.67	73.51	63.67	0.86
5957.00	5.50	34.70	5954.90	37.69	69.44	75.78	79.00	61.51	0.48
6020.00	5.30	32.90	6017.62	42.61	72.73	81.59	84.30	59.64	0.42
6083.00	5.20	38.30	6080.35	47.30	76.08	87.27	89.59	58.13	0.80
6146.00	5.40	39.70	6143.08	51.82	79.75	93.06	95.10	56.99	0.38
6210.00	5.40	37.30	6206.80	56.53	83.50	99.94	100.83	55.90	0.35
6272.00	5.50	35.20	6268.52	61.28	86.98	104.86	106.40	54.83	0.36
6334.00	5.30	32.40	6330.24	66.12	90.22	110.58	111.86	53.76	0.53
6397.00	5.20	34.00	6392.98	70.95	93.38	116.22	117.27	52.77	0.28
6460.00	4.80	33.70	6455.74	75.51	96.44	121.60	122.48	51.94	0.64
6524.00	5.10	32.40	6519.50	80.14	99.45	127.00	127.72	51.14	0.50
6587.00	5.30	38.00	6582.24	84.79	102.74	132.62	133.21	50.47	0.87
6651.00	5.40	39.40	6645.96	89.45	106.47	138.55	139.06	49.97	0.26
6714.00	5.20	38.60	6708.69	93.97	110.13	144.34	144.78	49.53	0.34
6776.00	5.40	38.00	6770.43	98.47	113.68	150.03	150.40	49.10	0.33
6839.00	5.60	37.30	6833.14	103.25	117.37	156.01	156.32	48.66	0.33
6903.00	5.50	38.80	6896.84	108.12	121.18	162.16	162.41	48.26	0.28
6967.00	5.20	37.20	6960.56	112.82	124.86	168.08	168.28	47.90	0.52

Measured Depth Ft	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	LOCALS		Vertical Section Ft	CLOSURE		Dogleg Severity Deg/100
				N-S Ft	E-W Ft		Distance Ft	Direction Deg	
7030.00	5.20	36.60	7023.30	117.39	128.29	173.73	173.89	47.54	0.09
7093.00	5.50	34.90	7086.03	122.16	131.72	179.53	179.64	47.16	0.54
7157.00	5.50	35.10	7149.73	127.18	135.24	185.57	185.64	46.76	0.03
7227.00	5.60	36.70	7219.40	132.66	139.21	192.25	192.30	46.38	0.26
7259.00	5.50	36.40	7251.25	135.15	141.05	195.31	195.35	46.22	0.33
7291.00	5.00	37.10	7283.12	137.50	142.80	198.21	198.24	46.08	1.58
7323.00	4.70	35.30	7315.00	139.68	144.40	200.88	200.90	45.95	1.05
7355.00	4.40	33.00	7346.90	141.78	145.83	203.37	203.39	45.81	1.10
7386.00	4.10	31.00	7377.82	143.73	147.04	205.61	205.62	45.65	1.08
7418.00	3.60	30.20	7409.75	145.58	148.14	207.69	207.69	45.50	1.57
7450.00	3.00	33.10	7441.69	147.14	149.10	209.48	209.48	45.38	1.95
7482.00	2.20	35.40	7473.66	148.35	149.91	210.90	210.91	45.30	2.52
7514.00	1.50	34.70	7505.64	149.19	150.51	211.92	211.92	45.25	2.19
7546.00	0.70	34.30	7537.64	149.70	150.86	212.53	212.53	45.22	2.50
7578.00	0.30	318.40	7569.64	149.92	150.91	212.72	212.72	45.19	2.16
7610.00	0.20	292.00	7601.64	150.01	150.80	212.71	212.71	45.15	0.47
7736.00	0.40	226.30	7727.63	149.78	150.28	212.18	212.18	45.10	0.29
7862.00	0.30	228.80	7853.63	149.26	149.72	211.41	211.41	45.09	0.08
7989.00	0.70	240.90	7980.63	148.67	148.79	210.33	210.33	45.02	0.32
8053.00	0.60	243.80	8044.62	148.33	148.15	209.64	209.64	44.96	0.16
8116.00	0.20	163.40	8107.62	148.08	147.88	209.27	209.27	44.96	0.95
8181.00	0.70	65.00	8172.62	148.14	148.27	209.59	209.59	45.03	1.16
8244.00	0.50	56.80	8235.62	148.45	148.85	210.22	210.22	45.08	0.34
8307.00	0.30	113.50	8298.61	148.53	149.23	210.55	210.55	45.13	0.66
8371.00	0.40	66.10	8362.61	148.56	149.59	210.82	210.82	45.20	0.46
8435.00	0.50	31.10	8426.61	148.89	149.94	211.30	211.30	45.20	0.45
8498.00	0.50	39.10	8489.61	149.34	150.26	211.84	211.84	45.18	0.11
8562.00	0.70	85.90	8553.61	149.58	150.82	212.42	212.42	45.24	0.80
8626.00	0.40	93.80	8617.60	149.59	151.43	212.86	212.86	45.35	0.48
8696.00	0.50	61.80	8687.60	149.72	151.95	213.31	213.32	45.42	0.38
8759.00	1.00	51.40	8750.60	150.20	152.62	214.12	214.13	45.46	0.82
8823.00	1.20	52.40	8814.58	150.95	153.59	215.34	215.35	45.50	0.31
8886.00	1.00	42.40	8877.57	151.76	154.48	216.55	216.55	45.51	0.44
8950.00	0.80	121.90	8941.57	151.94	155.24	217.21	217.22	45.62	1.81
Last MWD Survey									
9046.00	1.40	112.00	9037.55	151.14	156.89	217.82	217.85	46.07	0.65

Job Number: Globe 14 Federal # 1
Company: Chesapeake Operating
Lease/Well: Globe 14 Federal # 1
Location: (NM27E) Eddy County
Rig Name:
RKB: 0.00 Ft
Vertical Datum:

State/Country:
Declination:
Grid:
Project name: Eddy County
Date/Time: 20-Dec-06 / 11:01
Well Name:
North Reference: True North
Convergence: 0.2138°

WinsURV3D SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 45.08°
Vertical Section Referenced to Wellhead
Local Coordinates Referenced to Wellhead

Direction referenced to True North

Measured Depth Ft	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	LOCALS		Vertical Section Ft	CLOSURE		Dogleg Severity Deg/100
				N-S Ft	E-W Ft		Distance Ft	Direction Deg	
5187.00	0.06	290.38	5186.41	9.12	49.12	41.22	49.96	79.48	0.00
5418.00	0.40	262.30	5417.41	9.05	48.21	40.53	49.05	79.36	0.15
5450.00	0.30	257.50	5449.41	9.02	48.02	40.37	48.86	79.36	0.33
5513.00	1.20	22.50	5512.40	9.59	48.11	40.84	49.05	78.72	2.21
5545.00	2.10	34.10	5544.39	10.39	48.56	41.72	49.66	77.92	2.99
5577.00	3.00	39.90	5576.36	11.52	49.43	43.13	50.75	76.88	2.92
5609.00	3.80	39.10	5608.30	12.98	50.64	45.02	52.27	75.62	2.50
5641.00	4.50	39.10	5640.22	14.78	52.10	47.33	54.15	74.16	2.19
5672.00	4.50	37.80	5671.12	16.68	53.61	49.74	56.14	72.71	0.33
5704.00	4.40	36.70	5703.02	18.66	55.11	52.20	58.18	71.29	0.41
5736.00	4.90	37.80	5734.92	20.73	56.68	54.77	60.35	69.92	1.59
5768.00	5.50	38.40	5766.79	23.01	58.47	57.65	62.84	68.52	1.88
5832.00	5.40	38.70	5830.50	27.76	62.26	63.69	68.17	65.97	0.16
5894.00	5.80	35.10	5892.20	32.60	65.89	69.67	73.51	63.67	0.86
5957.00	5.50	34.70	5954.90	37.69	69.44	75.78	79.00	61.51	0.48
6020.00	5.30	32.90	6017.62	42.61	72.73	81.59	84.30	59.64	0.42
6083.00	5.20	38.30	6080.35	47.30	76.08	87.27	89.59	58.13	0.80
6146.00	5.40	39.70	6143.08	51.82	79.75	93.06	95.10	56.99	0.38
6210.00	5.40	37.30	6206.80	56.53	83.50	99.04	100.83	55.90	0.35
6272.00	5.50	35.20	6268.52	61.28	86.98	104.86	106.40	54.83	0.36
6334.00	5.30	32.40	6330.24	66.12	90.22	110.58	111.86	53.76	0.53
6397.00	5.20	34.00	6392.98	70.95	93.38	116.22	117.27	52.77	0.28
6460.00	4.80	33.70	6455.74	75.51	96.44	121.60	122.48	51.94	0.64
6524.00	5.10	32.40	6519.50	80.14	99.45	127.00	127.72	51.14	0.50
6587.00	5.30	38.00	6582.24	84.79	102.74	132.62	133.21	50.47	0.87
6651.00	5.40	39.40	6645.96	89.45	106.47	138.55	139.06	49.97	0.26
6714.00	5.20	38.60	6708.69	93.97	110.13	144.34	144.78	49.53	0.34
6776.00	5.40	38.00	6770.43	98.47	113.68	150.03	150.40	49.10	0.33
6839.00	5.60	37.30	6833.14	103.25	117.37	156.01	156.32	48.66	0.33
6903.00	5.50	38.80	6896.84	108.12	121.18	162.16	162.41	48.26	0.28
6967.00	5.20	37.20	6960.56	112.82	124.86	168.08	168.28	47.90	0.52

Measured Depth Ft	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	L O C A L S		Vertical Section Ft	C L O S U R E		Dogleg Severity Deg/100
				N-S Ft	E-W Ft		Distance Ft	Direction Deg	
7030.00	5.20	36.60	7023.30	117.39	128.29	173.73	173.89	47.54	0.09
7093.00	5.50	34.90	7086.03	122.16	131.72	179.53	179.64	47.16	0.54
7157.00	5.50	35.10	7149.73	127.18	135.24	185.57	185.64	46.76	0.03
7227.00	5.60	36.70	7219.40	132.66	139.21	192.25	192.30	46.38	0.26
7259.00	5.50	36.40	7251.25	135.15	141.05	195.31	195.35	46.22	0.33
7291.00	5.00	37.10	7283.12	137.50	142.80	198.21	198.24	46.08	1.58
7323.00	4.70	35.30	7315.00	139.68	144.40	200.88	200.90	45.95	1.05
7355.00	4.40	33.00	7346.90	141.78	145.83	203.37	203.39	45.81	1.10
7386.00	4.10	31.00	7377.82	143.73	147.04	205.61	205.62	45.65	1.08
7418.00	3.60	30.20	7409.75	145.58	148.14	207.69	207.69	45.50	1.57
7450.00	3.00	33.10	7441.69	147.14	149.10	209.48	209.48	45.38	1.95
7482.00	2.20	35.40	7473.66	148.35	149.91	210.90	210.91	45.30	2.52
7514.00	1.50	34.70	7505.64	149.19	150.51	211.92	211.92	45.25	2.19
7546.00	0.70	34.30	7537.64	149.70	150.86	212.53	212.53	45.22	2.50
7578.00	0.30	318.40	7569.64	149.92	150.91	212.72	212.72	45.19	2.16
7610.00	0.20	292.00	7601.64	150.01	150.80	212.71	212.71	45.15	0.47
7736.00	0.40	226.30	7727.63	149.78	150.28	212.18	212.18	45.10	0.29
7862.00	0.30	228.80	7853.63	149.26	149.72	211.41	211.41	45.09	0.08
7989.00	0.70	240.90	7980.63	148.67	148.79	210.33	210.33	45.02	0.32
8053.00	0.60	243.80	8044.62	148.33	148.15	209.64	209.64	44.96	0.16
8116.00	0.20	163.40	8107.62	148.08	147.88	209.27	209.27	44.96	0.95
8181.00	0.70	65.00	8172.62	148.14	148.27	209.59	209.59	45.03	1.16
8244.00	0.50	56.80	8235.62	148.45	148.85	210.22	210.22	45.08	0.34
8307.00	0.30	113.50	8298.61	148.53	149.23	210.55	210.55	45.13	0.66
8371.00	0.40	66.10	8362.61	148.56	149.59	210.82	210.82	45.20	0.46
8435.00	0.50	31.10	8426.61	148.89	149.94	211.30	211.30	45.20	0.45
8498.00	0.50	39.10	8489.61	149.34	150.26	211.84	211.84	45.18	0.11
8562.00	0.70	85.90	8553.61	149.58	150.82	212.42	212.42	45.24	0.80
8626.00	0.40	93.80	8617.60	149.59	151.43	212.86	212.86	45.35	0.48
8696.00	0.50	61.80	8687.60	149.72	151.95	213.31	213.32	45.42	0.38
8759.00	1.00	51.40	8750.60	150.20	152.62	214.12	214.13	45.46	0.82
8823.00	1.20	52.40	8814.58	150.95	153.59	215.34	215.35	45.50	0.31
8886.00	1.00	42.40	8877.57	151.76	154.48	216.55	216.55	45.51	0.44
8950.00	0.80	121.90	8941.57	151.94	155.24	217.21	217.22	45.62	1.81
Last MWD Survey									
9046.00	1.40	112.00	9037.55	151.14	156.89	217.82	217.85	46.07	0.65

To the best of my knowledge the surveys listed above, from 5187.00' MD to 9046.00' MD are accurate and true surveys.

Bridget Jacobs Quantum Drilling Motors

Signature _____ Date: _____



Directional Services

Job Number: 0611175051794

Company: Chesapeake Operating

Lease/Well: Globe 14 Federal, Well #1

Location: Eddy County, New Mexico

Rig Name: Patterson #504

RKB: 22'

G.L. or M.S.L.: GL

State/Country: New Mexico/USA

Declination: 8.13°

Grid: East To Grid

File name: F:\SURVEY\2006SU~1\CHESAP~1\GLOB14-1.SVY

Date/Time: 06-Dec-06 / 09:02

Curve Name: Surface - 4293' M.D.

REC'D DEC 13 2006

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane .00
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
Surface MD to 4293 MD is, to the best of
our knowledge a true and accurate account of
the well bore.

Nina Little
Multi-Shot

12-6-06
Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200.00	.50	98.24	200.00	-.13	.86	-.13	.87	98.24	.25
400.00	1.00	41.06	399.98	1.07	2.87	1.07	3.06	69.65	.42
600.00	1.25	39.89	599.94	4.06	5.42	4.06	6.77	53.19	.13
800.00	1.25	53.71	799.90	7.02	8.58	7.02	11.08	50.70	.15
1000.00	1.50	50.53	999.84	9.98	12.36	9.98	15.88	51.08	.13
1200.00	1.75	50.36	1199.76	13.59	16.73	13.59	21.55	50.91	.13
1400.00	1.50	56.18	1399.68	16.99	21.25	16.99	27.21	51.36	.15
1600.00	1.50	53.00	1599.61	20.03	25.52	20.03	32.44	51.88	.04
1800.00	.75	64.81	1799.57	22.16	28.79	22.16	36.33	52.42	.39
2000.00	.50	76.64	1999.56	22.92	30.83	22.92	38.41	53.37	.14
2200.00	.75	77.39	2199.55	23.40	32.95	23.40	40.42	54.62	.13

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
2400.00	.50	95.03	2399.53	23.61	35.10	23.61	42.31	56.07	.16
2600.00	.50	100.67	2599.53	23.38	36.83	23.38	43.62	57.60	.02
2800.00	.25	113.32	2799.52	23.04	38.09	23.04	44.51	58.83	.13
3000.00	.25	137.96	2999.52	22.54	38.78	22.54	44.86	59.83	.05
3200.00	.50	133.76	3199.51	21.62	39.70	21.62	45.21	61.43	.13
3400.00	.50	135.70	3399.51	20.39	40.94	20.39	45.74	63.53	.01
3600.00	.50	154.64	3599.50	18.98	41.92	18.98	46.02	65.65	.08
3800.00	.75	134.61	3799.49	17.27	43.23	17.27	46.55	68.23	.16
4000.00	1.00	135.58	3999.46	15.10	45.38	15.10	47.83	71.59	.13
4200.00	1.00	147.53	4199.43	12.38	47.54	12.38	49.13	75.40	.10
Last Survey Depth Recorded									
4293.00	.75	141.47	4292.42	11.22	48.36	11.22	49.64	76.93	.29



Directional Services

Job Number: 0611175051794

Company: Chesapeake Operating

Lease/Well: Globe 14 Federal, Well #1

Location: Eddy County, New Mexico

Rig Name: Patterson #504

RKB: 22'

G.L. or M.S.L.: GL

State/Country: New Mexico/USA

Declination: 8.13°

Grid: East To Grid

File name: F:\SURVEY\2006SU~1\CHESAP~1\GLOB14-1.SVY

Date/Time: 06-Dec-06 / 09:02

Curve Name: Surface - 4293' M.D.

We hereby certify that our survey data from
Surface MD to 4293 MD is, to the best of
our knowledge a true and accurate account of
the well bore.

Wanda Oettle 12-6-06
Multi-Shot Date

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane .00
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200.00	.50	98.24	200.00	-.13	.86	-.13	.87	98.24	.25
400.00	1.00	41.06	399.98	1.07	2.87	1.07	3.06	69.65	.42
600.00	1.25	39.89	599.94	4.06	5.42	4.06	6.77	53.19	.13
800.00	1.25	53.71	799.90	7.02	8.58	7.02	11.08	50.70	.15
1000.00	1.50	50.53	999.84	9.98	12.36	9.98	15.88	51.08	.13
1200.00	1.75	50.36	1199.76	13.59	16.73	13.59	21.55	50.91	.13
1400.00	1.50	56.18	1399.68	16.99	21.25	16.99	27.21	51.36	.15
1600.00	1.50	53.00	1599.61	20.03	25.52	20.03	32.44	51.88	.04
1800.00	.75	64.81	1799.57	22.16	28.79	22.16	36.33	52.42	.39
2000.00	.50	76.64	1999.56	22.92	30.83	22.92	38.41	53.37	.14
2200.00	.75	77.39	2199.55	23.40	32.95	23.40	40.42	54.62	.13

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
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2400.00	.50	95.03	2399.53	23.61	35.10	23.61	42.31	56.07	.16
2600.00	.50	100.67	2599.53	23.38	36.83	23.38	43.62	57.60	.02
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3000.00	.25	137.96	2999.52	22.54	38.78	22.54	44.86	59.83	.05
3200.00	.50	133.76	3199.51	21.62	39.70	21.62	45.21	61.43	.13
3400.00	.50	135.70	3399.51	20.39	40.94	20.39	45.74	63.53	.01
3600.00	.50	154.64	3599.50	18.98	41.92	18.98	46.02	65.65	.08
3800.00	.75	134.61	3799.49	17.27	43.23	17.27	46.55	68.23	.16
4000.00	1.00	135.58	3999.46	15.10	45.38	15.10	47.83	71.59	.13
4200.00	1.00	147.53	4199.43	12.38	47.54	12.38	49.13	75.40	.10
Last Survey Depth Recorded									
4293.00	.75	141.47	4292.42	11.22	48.36	11.22	49.64	76.93	.29

SUNDRY NOTICE SPECIAL STIPULATIONS

1. This sundry is accepted for record only. The following additional information is needed:
 2. Operator must submit a copy of its approval from the state to convert this well to salt water disposal, or the well must be T/A'd.
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Engineering
can be reached at 505-706-2779 for any variances that might be necessary.

F Wright 8/20/07