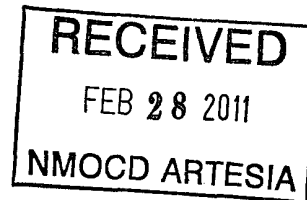


EOG

Sand Tank Bone Springs
Eddy County, NM
Sand Tank 1 Federal Com #4H
VH - Job #32K1110938

30-015-37214



Survey: Actual

SDI Standard Survey Report

16 December, 2010

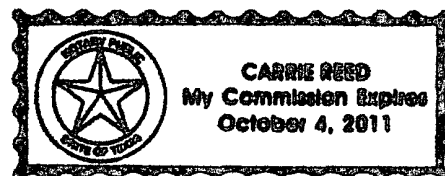
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notorized this date 17th of December, 2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	EOG	Local Co-ordinate Reference:	Well Sand Tank 1 Federal Com #4H
Project:	Sand Tank Bone Springs	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Sand Tank 1 Federal Com #4H	North Reference:	Grid
Wellbore:	VH - Job #32K1110938	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1110938	Database:	EDM-Regulatory

Project	Sand Tank Bone Springs		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Eddy County, NM			
Site Position:	Northing:	644,234.28 usft	Latitude:	32° 46' 14.521 N
From:	Easting:	596,328.98 usft	Longitude:	104° 1' 11.785 W
Position Uncertainty:	0.0 usft	Slot Radius:	0"	Grid Convergence:
				0.17 °

Well	Sand Tank 1 Federal Com #4H, Directional (Pathfinder)			
Well Position	+N/-S	0.0 usft	Northing:	646,702.87 usft
	+E/-W	0.0 usft	Easting:	596,234.32 usft
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft
			Ground Level:	0.0 usft

Wellbore	VH - Job #32K1110938				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	BGGM2010	11/29/2010	7.96	60.64	49,015

Design	VH - Job #32K1110938			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth:
				0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	270.31

Survey Program	Date	12/16/2010		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
100.0	3,217.0	Actual (VH - Job #32K1110938)	Keeper	Keeper Surface Readout Gyro

Survey							
Measured Depth	Inclination	Azimuth	True Vertical	North/South	East/West	Closure Azimuth	Closure Distance
(usft)	(°)	(°)	Depth	(usft)	(usft)	(°)	(usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0
100.0	0.49	67.77	100.0	0.2	0.4	67.77	0.4
200.0	1.12	89.25	200.0	0.3	1.8	79.23	1.8
300.0	1.17	89.53	300.0	0.4	3.8	84.58	3.8
400.0	1.18	85.30	399.9	0.5	5.8	85.57	5.8
500.0	1.11	87.84	499.9	0.6	7.8	85.82	7.8
600.0	1.17	94.47	599.9	0.5	9.8	86.91	9.8
700.0	1.39	84.58	699.9	0.6	12.0	87.32	12.0
800.0	1.32	90.78	799.9	0.7	14.4	87.36	14.4
900.0	1.46	83.74	899.8	0.8	16.8	87.32	16.8
1,000.0	1.65	93.85	999.8	0.8	19.5	87.57	19.5
1,100.0	1.80	86.70	1,099.7	0.8	22.5	87.91	22.5

Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	EOG	Local Co-ordinate Reference:	Well Sand Tank 1 Federal Com #4H
Project:	Sand Tank Bone Springs	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Sand Tank 1 Federal Com #4H	North Reference:	Grid
Wellbore:	VH - Job #32K1110938	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1110938	Database:	EDM-Regulatory

Survey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)	
1,200.0	2.01	86.84	1,199.7	1.0	25.8	87.76	25.8	
1,300.0	1.81	85.88	1,299.6	1.2	29.1	87.61	29.2	
1,400.0	1.86	82.58	1,399.6	1.5	32.3	87.27	32.4	
1,500.0	1.88	82.46	1,499.5	2.0	35.6	86.84	35.6	
1,600.0	1.67	81.41	1,599.5	2.4	38.6	86.45	38.7	
1,700.0	1.77	73.99	1,699.4	3.0	41.6	85.81	41.7	
1,800.0	1.86	74.35	1,799.4	3.9	44.6	85.00	44.8	
1,900.0	1.67	71.58	1,899.3	4.8	47.6	84.23	47.8	
2,000.0	1.82	71.93	1,999.3	5.8	50.4	83.49	50.8	
2,100.0	1.61	73.43	2,099.2	6.7	53.3	82.89	53.7	
2,200.0	1.64	65.30	2,199.2	7.6	55.9	82.21	56.5	
2,300.0	1.59	68.54	2,299.2	8.8	58.5	81.49	59.2	
2,400.0	1.28	67.34	2,399.1	9.7	60.9	80.95	61.6	
2,500.0	1.29	70.41	2,499.1	10.5	63.0	80.53	63.8	
2,600.0	1.01	65.89	2,599.1	11.2	64.8	80.16	65.8	
2,700.0	0.95	65.73	2,699.1	11.9	66.4	79.80	67.4	
2,800.0	0.77	41.37	2,799.1	12.8	67.6	79.29	68.8	
2,900.0	0.92	59.96	2,899.1	13.7	68.7	78.73	70.1	
3,000.0	0.84	68.36	2,999.0	14.4	70.1	78.42	71.5	
3,100.0	0.84	52.86	3,099.0	15.1	71.4	78.07	72.9	
3,200.0	0.72	51.58	3,199.0	15.9	72.4	77.61	74.2	
3,217.0	0.98	44.30	3,216.0	16.1	72.6	77.52	74.4	



Project: Sand Tank Bone Springs
Eddy County, NM
Well: Sand Tank 1 Federal Com #4H
Wellbore: VH - Job #32K1110938
Design: VH - Job #32K1110938

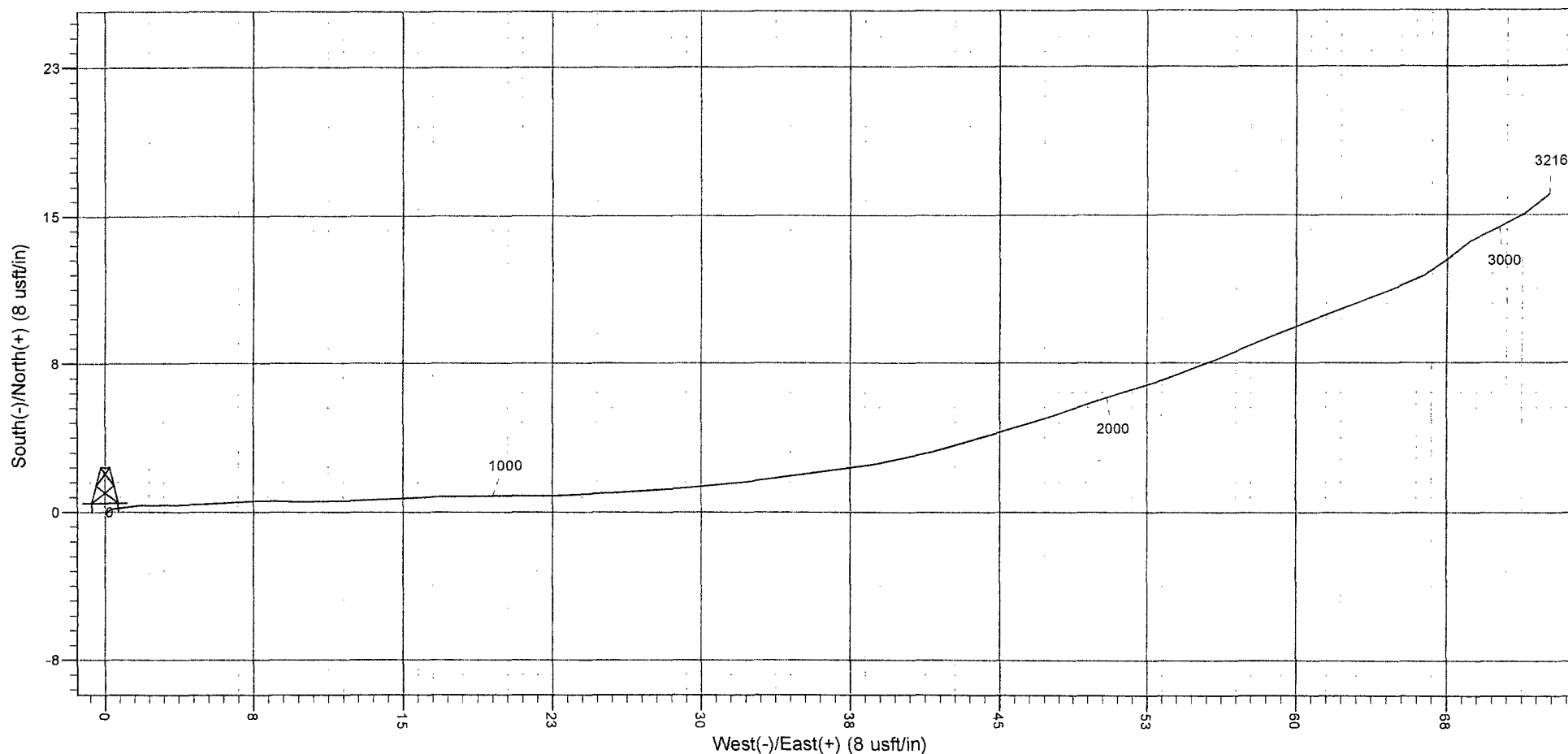


Azimuths to Grid North
True North: -0.17°
Magnetic North: 7.79°
Magnetic Field
Strength: 49015.0nT
Dip Angle: 60.64°
Date: 11/29/2010
Model: BGGM2010

WELL DETAILS: Sand Tank 1 Federal Com #4H
WELL @ 0.0usft (Original Well Elev)

Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	646702.87	596234.32	32° 46' 38.951 N	104° 1' 12.809 W	



PROJECT DETAILS: Sand Tank Bone Springs
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

SITE DETAILS: Eddy County, NM
Site Centre Latitude: 32° 46' 14.521 N
Longitude: 104° 1' 11.785 W
Positional Uncertainty: 0.0
Convergence: 0.17
Local North: Grid