



Scientific
Drilling

200 OCT 23 PM 12:10

070 FARMINGTON, NM

DIRECTIONAL SURVEY REPORT

Prepared For

VASTAR RESOURCES, INC.

CARRACAS 36 A #1

36-32N-SW

RIO ARRIBA COUNTY, NM

Prepared By:

Judi Moore - Well Planner

Scientific Drilling International

Rocky Mountain District

Scientific Drilling International
7237 W. Barton Rd. - P.O. Box 1600
Mills, WY 82644
(307) 472-6621
judimoore-sdi@caspers.net



Scientific
Drilling

Directional Survey Certification

RE: <u>Vastar Resources, Inc.</u>	<u>Operator</u>
<u>Carracas 36 A #1</u>	<u>Well Name & No.</u>
<u>Sec. 36</u> , <u>T32N</u> , <u>R5W</u>	<u>Surface Hole Location</u>
<u>Rio Arriba County, NM</u>	<u>Location</u>
<u>41DMWD0900133</u>	<u>SDI Job No.</u>

I, Judi Moore, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 423 feet to a measured depth of 4024 feet is true and correct as determined from all available records.

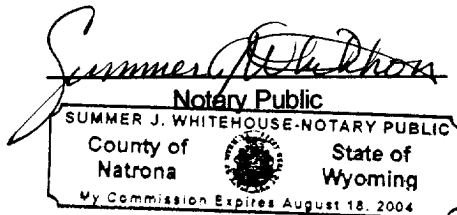
<u>Judi Moore</u>	<u>Well Planner</u>	<u>SDI</u>
Signature	Title	Company

State of : Wyoming }

County of : Natrona } ss

On this 10th day of October, 2000, before me personally appeared Judi Moore to me known as the person described in and who executed the foregoing instrument and acknowledged that (s)he executed the same as his/her free act and deed.

Seal



Aug. 18, 2004
My Commission Expires



Scientific Drilling International

CASPER, WY

Company: Vastar Resources, Inc. **Date:** 10/9/2000 **Time:** 16:44:21 **Page:** 1
Field: Rio Arriba County, NM **Co-ordinate(NE) Reference:** Well: #1, True North
Site: CARRACAS 36 A #1 **Vertical (TVD) Reference:** SITE 0.0
Well: #1 **Section (VS) Reference:** Well (0.00E,0.00N,207.86Azi)
Wellpath: OH **Survey Calculation Method:** Minimum Curvature **Db:** Sybase

Survey: Survey #1 **Start Date:** 9/13/2000
Company: Scientific Drilling **Engineer:** John Sears
Tool: MWD, **Tied-to:** User Defined

Field: Rio Arriba County, NM

Map System: US State Plane Coordinate System 1927 **Map Zone:** New Mexico, Central Zone
Geo Datum: Clarke 1866 **Coordinate System:** Well Centre
Sys Datum: Mean Sea Level **Geomagnetic Model:** igrf2000

Site: CARRACAS 36 A #1
 SHL SEC.36,T32N,R5W

Site Position: **From:** Lease Line **Northing:** ft **Latitude:**
Position Uncertainty: 0.00 ft **Easting:** ft **Longitude:**
Ground Level: 0.00 ft **North Reference:** True
Grid Convergence: -0.15 deg

Well: #1 **Slot Name:**
Well Position: +N/-S 0.00 ft **Northing:** 2152991.41 ft **Latitude:** 36 54 59.999 N
 +E/-W 0.00 ft **Easting:** 426917.75 ft **Longitude:** 106 30 0.000 W
Position Uncertainty: 0.00 ft

Wellpath: OH **Drilled From:** Surface
Current Datum: SITE **Tie-on Depth:** 0.00 ft
Magnetic Data: 8/31/2000 **Above System Datum:** Mean Sea Level
Field Strength: 52202 nT **Declination:** 10.70 deg
Vertical Section: Depth From (TVD) +N/-S **Mag Dip Angle:** 64.14 deg
 ft ft ft **Direction**
 deg
 3796.00 0.00 0.00 207.86

Annotation

MD ft	TVD ft	
4024.00	3863.60	SURVEY @ 4024' MD IS A PROJECTION

Survey

Meas Depth ft	Inclination deg	Azimuth deg	TVD ft	Vert Sect ft	N/S ft	E/W ft	DLS deg/100ft	CLen ft	CLSD ft	CLSA deg
423.00	0.00	0.00	423.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
484.00	0.50	165.30	484.00	0.20	-0.26	0.07	0.82	61.00	0.27	165.30
538.00	1.80	215.50	537.99	1.21	-1.18	-0.37	2.83	54.00	1.23	197.25
568.00	4.00	222.90	567.95	2.69	-2.33	-1.35	7.42	30.00	2.69	210.15
629.00	9.00	216.80	628.54	9.46	-7.71	-5.66	8.26	61.00	9.56	216.29
690.00	11.21	216.09	688.59	20.04	-16.32	-12.01	3.63	61.00	20.27	216.35
752.00	13.30	216.20	749.17	33.06	-26.95	-19.77	3.37	62.00	33.42	216.27
814.00	14.90	215.70	809.30	48.02	-39.18	-28.64	2.59	62.00	48.53	216.17
881.00	16.80	212.20	873.75	66.21	-54.37	-38.83	3.17	67.00	66.81	215.53
939.00	18.60	209.40	929.01	83.81	-69.52	-47.83	3.43	58.00	84.39	214.53
1001.00	21.40	209.80	987.26	105.01	-87.95	-58.31	4.52	62.00	105.53	213.54
1063.00	21.30	210.70	1045.01	127.56	-107.45	-69.68	0.55	62.00	128.07	212.96
1123.00	20.90	210.40	1100.98	149.14	-126.05	-80.66	0.69	60.00	149.65	212.62
1185.00	20.80	211.00	1158.92	171.17	-145.03	-91.93	0.38	62.00	171.71	212.37
1246.00	19.70	210.40	1216.15	192.26	-163.18	-102.71	1.84	61.00	192.81	212.19
1307.00	19.40	209.40	1273.64	212.66	-180.87	-112.88	0.74	61.00	213.21	211.97
1369.00	18.70	210.50	1332.24	232.88	-198.41	-122.98	1.27	62.00	233.43	211.79
1463.00	20.60	205.30	1420.77	264.46	-226.35	-137.70	2.75	94.00	264.94	211.31
1557.00	20.10	207.60	1508.90	297.13	-255.61	-152.25	1.00	94.00	297.52	210.78



Scientific Drilling International

CASPER, WY

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Wellpath: OH

Date: 10/9/2000 Time: 16:44:21 Page: 2
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Survey

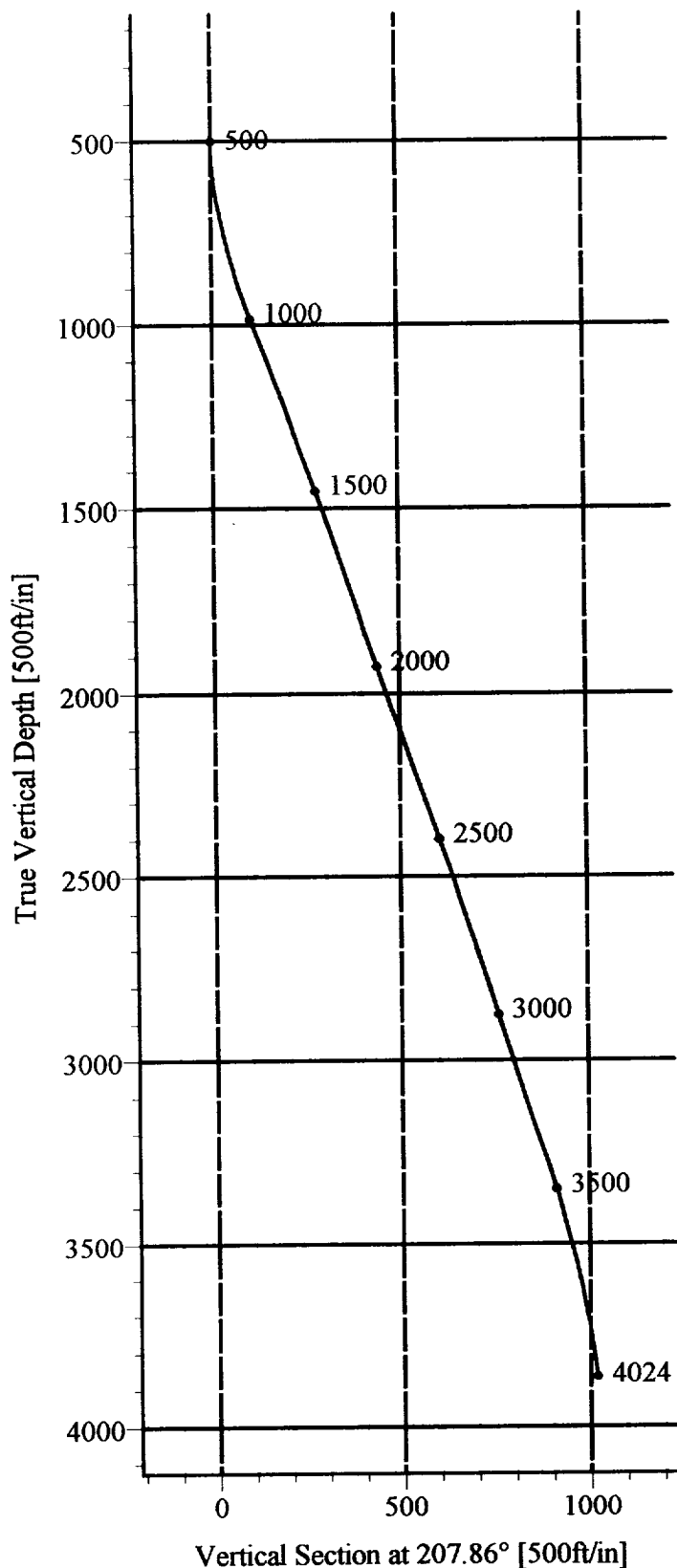
Meas Depth ft	Inclination deg	Azimuth deg	TVD ft	Vert Sect ft	N/S ft	E/W ft	DLS deg/100ft	CLen ft	CLSD ft	CLSA deg
1652.00	18.90	206.50	1598.45	328.84	-283.85	-166.68	1.32	95.00	329.17	210.42
1746.00	18.70	207.80	1687.44	359.13	-310.80	-180.50	0.49	94.00	359.42	210.15
1839.00	17.80	207.40	1775.76	388.25	-336.61	-194.00	0.98	93.00	388.51	209.96
1930.00	19.40	204.10	1862.01	417.24	-362.76	-206.57	2.10	91.00	417.45	209.66
2022.00	18.40	205.60	1949.04	447.00	-389.80	-219.08	1.21	92.00	447.15	209.34
2115.00	20.20	202.10	2036.82	477.65	-417.92	-231.47	2.30	93.00	477.74	208.98
2206.00	19.80	201.10	2122.33	508.58	-446.85	-242.93	0.58	91.00	508.62	208.53
2299.00	18.60	201.70	2210.16	538.97	-475.33	-254.08	1.31	93.00	538.98	208.13
2390.00	20.00	203.90	2296.04	568.93	-503.04	-265.75	1.73	91.00	568.93	207.85
2482.00	19.40	203.20	2382.65	599.85	-531.47	-278.15	0.70	92.00	599.86	207.63
2576.00	18.50	210.40	2471.57	630.32	-558.69	-291.85	2.66	94.00	630.32	207.58
2670.00	17.60	208.80	2560.95	659.43	-584.01	-306.24	1.09	94.00	659.43	207.67
2761.00	18.40	212.10	2647.49	687.50	-608.23	-320.50	1.42	91.00	687.51	207.79
2853.00	17.80	210.10	2734.94	716.04	-632.70	-335.27	0.94	92.00	716.04	207.92
2945.00	17.70	211.70	2822.56	744.04	-656.76	-349.67	0.54	92.00	744.05	208.03
3038.00	16.60	213.20	2911.43	771.38	-679.91	-364.37	1.27	93.00	771.39	208.19
3132.00	17.20	210.10	3001.37	798.63	-703.17	-378.70	1.15	94.00	798.66	208.31
3225.00	18.10	209.80	3089.99	826.81	-727.60	-392.77	0.97	93.00	826.84	208.36
3319.00	18.70	210.60	3179.18	856.46	-753.24	-407.70	0.69	94.00	856.50	208.42
3412.00	18.50	211.80	3267.33	886.07	-778.61	-423.06	0.46	93.00	886.13	208.52
3505.00	15.70	210.90	3356.21	913.36	-801.96	-437.30	3.02	93.00	913.44	208.60
3600.00	14.50	211.30	3447.92	938.07	-823.15	-450.08	1.27	95.00	938.16	208.67
3691.00	13.40	211.70	3536.24	959.96	-841.85	-461.54	1.21	91.00	960.07	208.73
3785.00	11.60	215.50	3628.01	980.20	-858.82	-472.76	2.10	94.00	980.34	208.83
3909.00	9.30	218.10	3749.94	1002.41	-876.85	-486.18	1.89	124.00	1002.62	209.01
3986.00	8.50	214.50	3826.02	1014.19	-886.44	-493.24	1.27	77.00	1014.43	209.09
4024.00	8.50	214.50	3863.60	1019.77	-891.07	-496.42	0.00	38.00	1020.02	209.12

-368 -787
-1256 1283

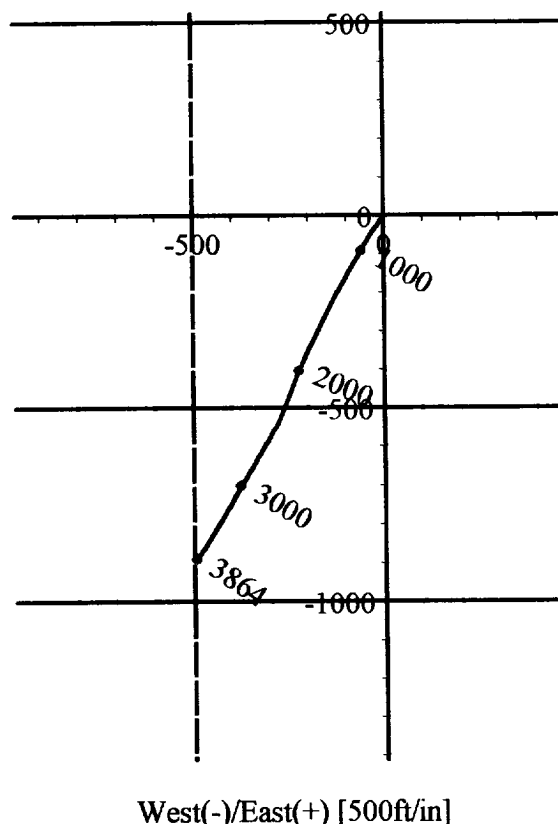


Vastar Resources, Inc.

Field: Rio Arriba County, NM
 Site: CARRACAS 36 A #1
 Well: #1
 Wellpath: OH
 Survey: Survey #1



South(-)/North(+) [500ft/in]



BOTTOM HOLE CLOSURE

38.0 ft. 209.12° Azimuth

FINAL STATION

4024.0' MD 3863.6' TVD
 8.5° Angle 214.5° Azimuth
 South 891.07 ft. West 496.42 ft.
 1019.77' Vert. Sect.

Survey: Survey #1 (#1/OH)

Created By: Judi Moore

Date: 10/9/2000

Checked: _____

Date: _____

Reviewed: _____

Date: _____

Approved: _____

Date: _____