

Gyrodata Incorporated
3811 S. Co. Rd. 1285
Odessa, TX. 79765

432/561-8458
Fax: 432/563-7982

2006 OCT 23 AM 6 52

RECEIVED
OTO FACTORY

2005 JAN 28 07
OIL CONS. DIV.

DIST. 2

14 2-2-07

30 -039-29672

Surf. 1625/S 1560/W

BHL 1610/S 1564/W

SURVEY REPORT

Williams Production Company, LLC

Rosa Unit No. 362 (KFE)

Aws #473

Rio Arriba County, New Mexico

MD0706G_229

24 Jul 2006

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Gyrodata Incorporated
3811 S. Co. Rd. 1285
Odessa, TX. 79765

432/561-8458
Fax: 432/563-7982

July 26, 2006

Williams Production
Attn: Drilling Department
P.O. Box 3102 MS 25-3
Tulsa, Oklahoma 74101

Re: **Rosa Unit No. 362 (KFE)**
Rio Arriba County, New Mexico

Enclosed, please find one (1) original and one (1) disk of the completed survey for the above referenced well.

We would like to take this opportunity to thank you for using Gyrodata, and we look forward to serving you in the future.

Sincerely,

A handwritten signature in dark ink, appearing to read "Jena Tumlin". The signature is fluid and cursive, with a large loop at the end.

Jena Tumlin
Operations

A Gyrodata Directional Survey

for

WILLIAMS PRODUCTION COMPANY, LLC

Lease: Rosa Unit Well: No. 362 (KFE), 2-7/8" Drillpipe
Location: Aws #473, Rio Arriba County, New Mexico

Job Number: MD0706G_229

Run Date: 24 Jul 2006

Surveyor: Richard Costarella; James Butler

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 36.853420 deg. N Longitude: 107.316880 deg. W

Azimuth Correction:

Gyro: Bearings are Relative to True North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

A Gyrodatta Directional Survey

Williams Production Company, Llc
 Lease: Rosa Unit Well: No. 362 (KFE), 2-7/8" Drillpipe
 Location: Aws #473, Rio Arriba County, New Mexico
 Job Number: MD0706G_229

MEASURED DEPTH feet	IN C L deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	N 0 0 E	0.00	0.00	0.0 0.0	0.00 N 0.00 E
0 TO 3580 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 2-7/8" DRILLPIPE ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO AWS # 473 R.K.B.							
100.00	0.47	88.35	N 88 21 E	0.47	100.00	0.4 88.3	0.01 N 0.41 E
200.00	0.39	104.60	S 75 24 E	0.15	200.00	1.1 93.1	0.06 S 1.15 E
300.00	0.22	173.93	S 6 4 E	0.37	299.99	1.5 102.7	0.34 S 1.49 E
400.00	0.22	164.84	S 15 9 E	0.04	399.99	1.7 114.6	0.72 S 1.57 E
500.00	0.19	164.38	S 15 37 E	0.04	499.99	2.0 122.6	1.06 S 1.66 E
600.00	0.18	162.56	S 17 26 E	0.01	599.99	2.2 128.0	1.37 S 1.75 E
700.00	0.27	168.82	S 11 11 E	0.09	699.99	2.5 133.5	1.75 S 1.85 E
800.00	0.27	180.80	S 0 48 W	0.06	799.99	2.9 139.6	2.22 S 1.89 E
900.00	0.28	131.87	S 48 8 E	0.23	899.99	3.3 141.7	2.62 S 2.07 E
1000.00	0.33	135.69	S 44 19 E	0.05	999.99	3.9 140.7	2.99 S 2.45 E
1100.00	0.47	141.69	S 38 19 E	0.15	1099.99	4.6 140.4	3.52 S 2.91 E
1200.00	0.55	130.90	S 49 6 E	0.13	1199.98	5.5 139.7	4.16 S 3.53 E
1300.00	0.53	131.11	S 48 54 E	0.03	1299.98	6.4 138.4	4.78 S 4.24 E
1400.00	0.60	136.76	S 43 15 E	0.09	1399.97	7.4 137.8	5.46 S 4.94 E
1500.00	0.40	141.74	S 38 15 E	0.21	1499.97	8.2 137.9	6.11 S 5.52 E
1600.00	0.25	145.82	S 34 11 E	0.15	1599.97	8.8 138.3	6.56 S 5.85 E
1700.00	0.08	259.16	S 79 10 W	0.29	1699.97	9.0 138.9	6.75 S 5.90 E
1800.00	0.16	220.57	S 40 34 W	0.11	1799.97	9.0 140.2	6.87 S 5.74 E
1900.00	0.33	183.41	S 3 25 W	0.23	1899.97	9.2 142.2	7.27 S 5.63 E
2000.00	0.70	162.44	S 17 33 E	0.40	1999.96	10.0 144.5	8.14 S 5.80 E

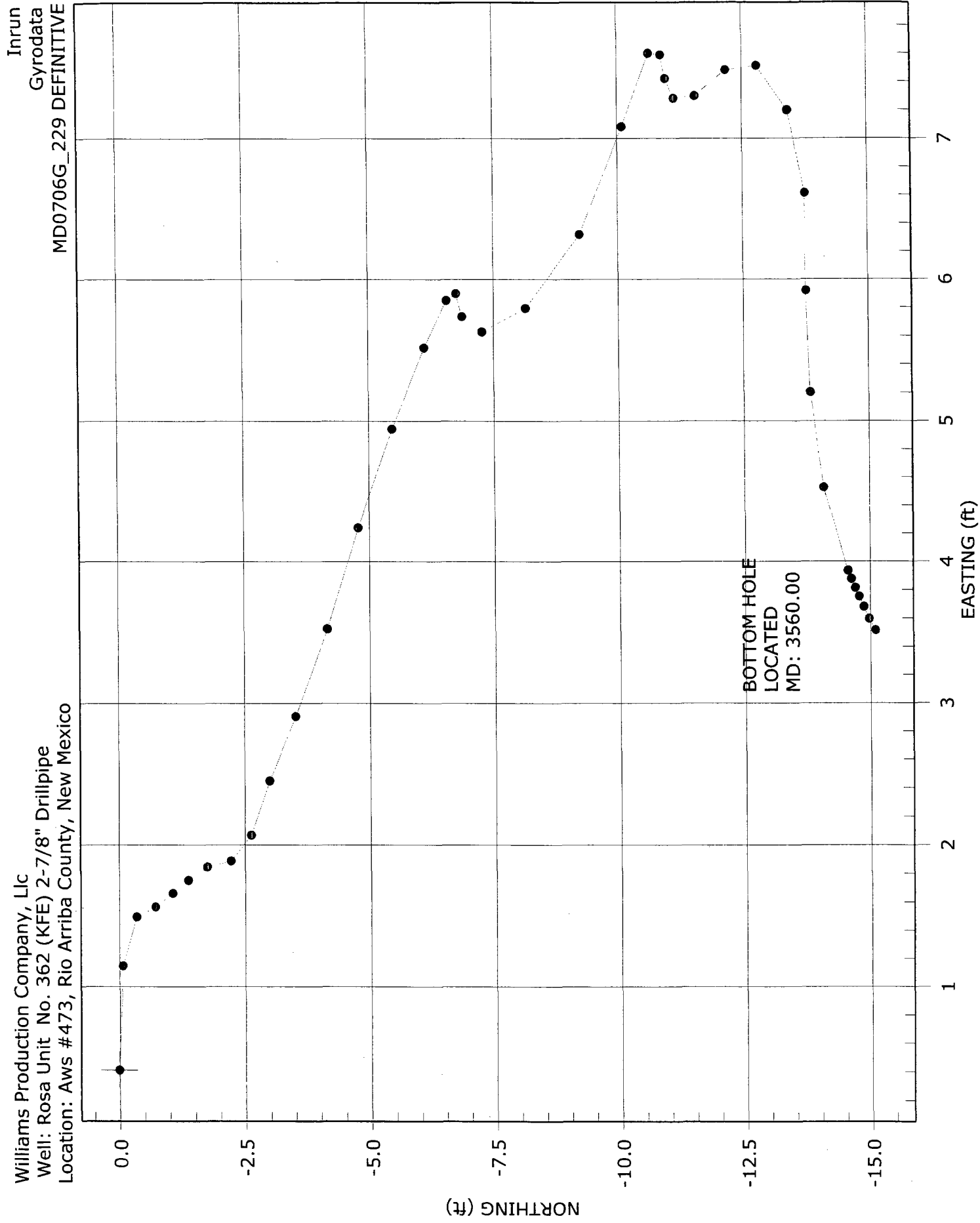
A Gyrodata Directional Survey

Williams Production Company, Llc
 Lease: Rosa Unit Well: No. 362 (KFE), 2-7/8" Drillpipe
 Location: Aws #473, Rio Arriba County, New Mexico
 Job Number: MD0706G_229

MEASURED DEPTH feet	IN C L deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
2100.00	0.71	146.31	S 33 41 E	0.20	2099.95	11.2 145.6	9.23 S 6.32 E
2200.00	0.63	130.22	S 49 47 E	0.20	2199.95	12.3 145.0	10.10 S 7.08 E
2300.00	0.24	151.69	S 28 19 E	0.42	2299.94	13.1 144.4	10.63 S 7.60 E
2400.00	0.14	241.55	S 61 33 W	0.28	2399.94	13.3 145.1	10.87 S 7.59 E
2500.00	0.08	240.07	S 60 4 W	0.07	2499.94	13.2 145.9	10.97 S 7.42 E
2600.00	0.18	210.70	S 30 42 W	0.12	2599.94	13.3 146.8	11.14 S 7.28 E
2700.00	0.34	161.32	S 18 41 E	0.27	2699.94	13.7 147.7	11.56 S 7.30 E
2800.00	0.39	165.33	S 14 40 E	0.05	2799.94	14.3 148.4	12.17 S 7.48 E
2900.00	0.35	190.46	S 10 27 W	0.17	2899.94	14.8 149.6	12.80 S 7.51 E
3000.00	0.47	219.04	S 39 2 W	0.23	2999.94	15.2 151.8	13.41 S 7.20 E
3100.00	0.38	266.57	S 86 34 W	0.35	3099.93	15.3 154.3	13.75 S 6.61 E
3200.00	0.42	272.26	N 87 44 W	0.06	3199.93	15.0 156.7	13.76 S 5.92 E
3300.00	0.41	255.77	S 75 46 W	0.12	3299.93	14.8 159.4	13.83 S 5.20 E
3400.00	0.42	243.69	S 63 41 W	0.09	3399.93	14.8 162.2	14.08 S 4.53 E
3500.00	0.46	220.26	S 40 15 W	0.18	3499.92	15.1 164.9	14.55 S 3.93 E
3510.00	0.56	221.55	S 41 33 W	0.96	3509.92	15.1 165.1	14.62 S 3.88 E
3520.00	0.59	218.13	S 38 8 W	0.49	3519.92	15.2 165.5	14.70 S 3.81 E
3530.00	0.57	214.26	S 34 16 W	0.46	3529.92	15.2 165.8	14.78 S 3.75 E
3540.00	0.77	222.20	S 42 12 W	2.25	3539.92	15.3 166.1	14.87 S 3.68 E
3550.00	0.80	214.15	S 34 9 W	1.13	3549.92	15.4 166.5	14.98 S 3.59 E
3560.00	0.88	212.06	S 32 4 W	0.86	3559.92	15.5 166.9	15.10 S 3.52 E

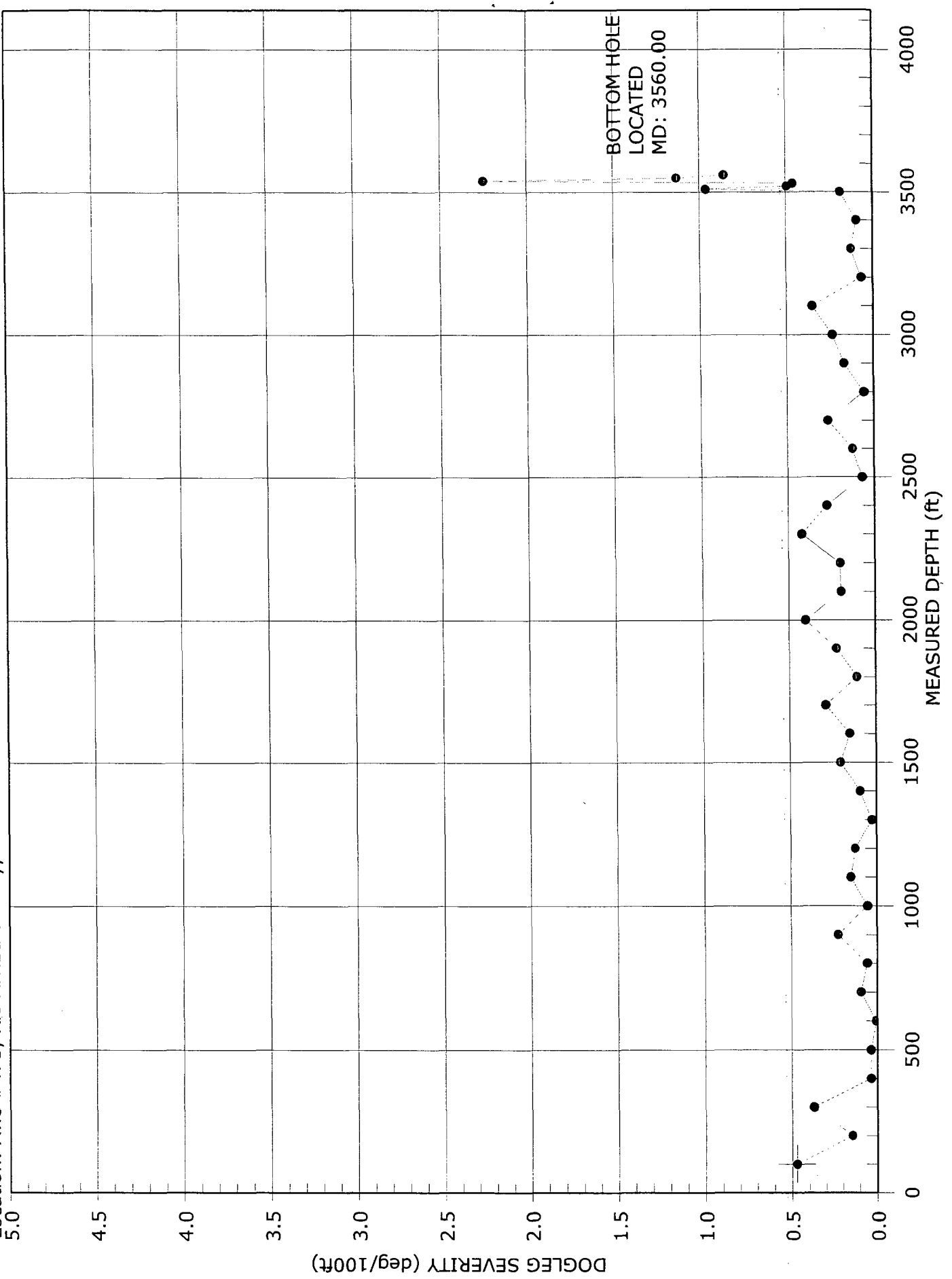
Final Station Closure: Distance: 15.50 ft Az: 166.90 deg.

Williams Production Company, Llc
Well: Rosa Unit No. 362 (KFE) 2-7/8" Drillpipe
Location: Aws #473, Rio Arriba County, New Mexico



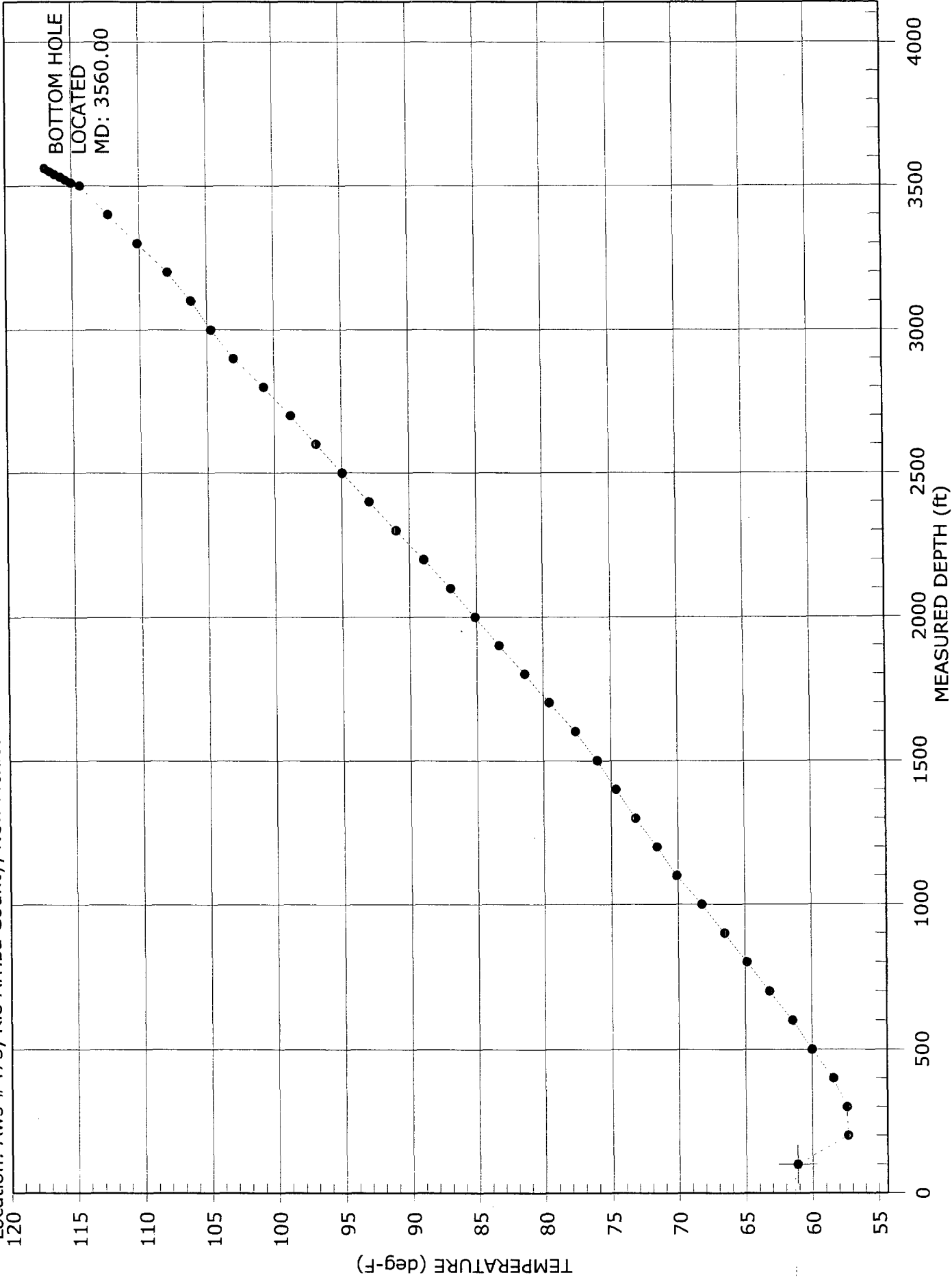
Williams Production Company, Llc
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Location: Aws #473, Rio Arriba County, New Mexico

Inrun
Gyrodata
MD0706G_229 DEFINITIVE



Williams Production Company, Llc
Well: Rosa Unit No. 362 (KFE) 2-7/8" Drillpipe
Location: Aws #473, Rio Arriba County, New Mexico

Inrun
Gyrodata
MD0706G_229 DEFINITIVE



ROSA UNIT #362 BASIN FRUITLAND COAL

Surface Hole Location:

1625' FSL and 1560' FWL
NE/4 SW/4 Sec 36(K), T31N, R05W
Rio Arriba, NM

Bottom Hole Location:

1610' FSL & 1564' FWL
NE/4 SW/4 Sec 36(K), T31N, R05W
Rio Arriba, NM

Elevation: 6802' GR
API: 30-039-29672

Spud: 04/25/06

Completed: 09/13/06

1st Delivery: 08/17/06

Top	MD
Ojo Alamo	2928'
Kirtland	3138'
Fruitland	3433'
Base of Coal	3629'

Top of Whipstock @ 3444'

TOL @ 3434'

CIBP @ 3455'

Sidetrack hole from 3444' - 3453',
Undereamed from 6-1/4" to 9-1/2"
from 3459' to 3722'

117 jts 2-7/8", 6.5#, J-55 tbg @ 3627' as
follows: 1/2" mule shoe, 1 jt tbg, 2.25" "F"
nipple @ 3597', 116 jts tbg.

87 jts 7", 23#, K-55, LT&C csg @ 3502'.
Float insert @ 3501'

35 sxs Type III Neat
cmt @ 3577'

Open Hole to 3580'

3545'

3555'

300, 0.54" holes

3570'

3635'

5 jts 5-1/2", 17#,
N-80 csg @
3434' - 3640'.

New TD 3722'

Hole Size	Casing	Cement	Volume	Top of Cmt
12-1/4"	9-5/8", 36#	190 sx	268 cu.ft.	Surface
8-3/4"	7", 23#	520 sx	1057 cu.ft.	Surface
6-1/4"	5-1/2", 17#	Did Not Cmt		