

NM OIL CONSERVATION

ARTESIA DISTRICT

OCD Artesia

JAN 06 2016

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT

5. Lease Serial No.
NMNM15882

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other			6. If Indian, Allottee or Tribe Name		
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other			7. Unit or CA Agreement Name and No.		
2. Name of Operator COG OPERATING LLC			8. Lease Name and Well No. MOSSY FEDERAL 1H		
3. Address 2208 W MAIN ST ARTESIA, NM 88210			9. API Well No. 30-015-42735		
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface NENE 990FNL 550FEL At top prod interval reported below Sec 7 T20S R30E Mer NMP At total depth NENE 408FNL 350FEL			10. Field and Pool, or Exploratory PARKWAY; BONE SPRING		
14. Date Spudded 12/07/2014			15. Date T.D. Reached 01/04/2015		
16. Date Completed ☐ D & A ☒ Ready to Prod. 04/10/2015			17. Elevations (DF, KB, RT, GL)* 3266 GL		
18. Total Depth: MD 13678 TVD 8424		19. Plug Back T.D.: MD 13678 TVD 8424		20. Depth Bridge Plug Set: MD TVD	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) DSN, DLL			22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit analysis)		

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
26.000	20.000 J55	94.0	0	292		1423		0	
17.500	13.375 J55	54.5	0	1691		1550		0	
12.250	9.625 J55	40.0	0	3210		925		0	
8.750	7.000 P110	29.0	0	7700		2450		0	
8.750	5.500 P110	17.0	7700	13671					

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	8586	7784						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING	9062	13475	9062 TO 13475	0.430	540	OPEN
B)						
C)						
D)						

26. Perforation Record

Depth Interval	Amount and Type of Material
9062 TO 13475	SEE IN REMARKS

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

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity
04/11/2015	06/08/2015	24	→	469.0	707.0	1560.0		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→	469	707	1560		POW

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
			→					
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

ACCEPTED FOR RECORD

GAS LIFT

DEC 31 2015

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #305463 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

Reclamation: 12/18/15

AB

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(Sold, used for fuel, vented, etc.)
SOLD

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
CHERRY CANYON	3451	4554		RUSTLER	81
BRUSHY CANYON	4555	6145		TOS	395
BONE SPRING LM	6146	7407		BOS	1605
1ST BONE SPRING	7408	8143		YATES	1698
2ND BONE SPRING	8144	8448		SEVEN RIVERS	1921
				CAPITAN	2027
				CHERRY CANYON	3451
				BRUSHY CANYON	4555

32. Additional remarks (include plugging procedure):

Perfs 7 1/2" Sand (#) Fluid (gal)
 13274-13475 3024 450635 361200
 12976-13173 6048 449745 375522
 12673-12873 6006 449322 382326
 12372-12574 5982 449955 377850
 12071-12271 6300 451718 378630
 11772-11970 6720 449895 378126
 11469-11670 6048 450511 377076

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
- 7 Other:

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

Electronic Submission #305463 Verified by the BLM Well Information System.
 For COG OPERATING LLC, sent to the Carlsbad
 Committed to AFMSS for processing by DEBORAH HAM on 12/21/2015 ()

Name (please print) STORMI DAVIS

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 06/18/2015

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

Additional data for transaction #305463 that would not fit on the form

32. Additional remarks, continued

11168-11369 6006 450873 378000
10867-11068 6006 450088 375606
10566-10771 6090 450010 379596
10266-10470 6048 449983 381024
9962-10165 6024 450053 378900
9664-9864 6024 449062 373188
9363-9563 6006 450242 375144
9062-9263 5964 448675 374934
Totals 88295 6750767 5647121

Additional Tops:

Bone Spring Lm 6146
1st Bone Spring 7408
2nd Bone Spring 8144

Surveys & logs attached.

**McVAY DRILLING COMPANY**

P.O. Box 2450
Hobbs, New Mexico 88241
(575) 397-3311
FAX: 39-DRILL

RECEIVED

JAN 12 15

COG
ARTESIA WEST

Well Name and Num: Mossy Federal #1H
Location: Sec 12, T20S, R29E
Operator: COG
Drilling Contractor: McVay Drilling Company

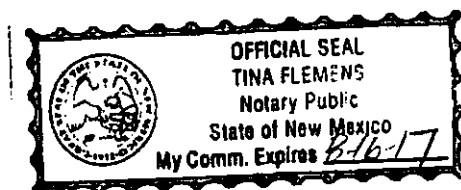
The undersigned certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>
0.60	365	0.08	4463	79.30	9535
0.50	583	1.30	4879	82.90	9724
2.40	846	1.00	5421	93.90	10160
2.70	909	0.90	5843	91.30	10571
3.20	1094	0.50	6376	91.20	10947
2.80	1251	0.70	6657	90.50	11230
3.20	1314	1.10	7144	89.10	11418
3.90	1446	1.50	7644	90.90	11888
3.80	1597	2.70	7783	88.40	12128
3.30	1628	24.00	8065	88.20	12558
4.30	1722	31.20	8159	89.30	12933
3.70	1785	60.40	8379	89.60	13310
3.50	2162	74.40	8525	91.70	13593
0.50	2633	89.10	8777		
3.50	3103	88.60	9062		
0.40	3457	86.70	9157		
0.60	3960	84.60	9252		

By: Mario A. Carmona Sr.

Subscribed and sworn to before me this 8th day of January, 2015

Tina Flemens
Notary Public, Lea County, New Mexico





January 13, 2015

Concho Resources, Inc.
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

Attn: Kanicia Castillo

RE: **Mossy Federal No 001H**

Please find enclosed a copy of the survey from 0.00' to 7651.00' ran on the above referenced well.

If I can be of any further service, please do not hesitate to call me at 800-606-4976.

Sincerely,

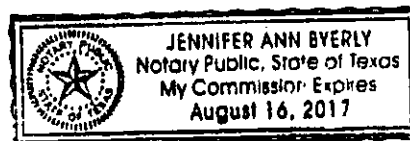
A handwritten signature in black ink, appearing to be "K. Havelka", written over a horizontal line.

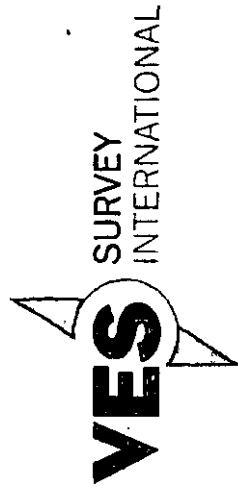
Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 13 day of January A.D., 2015, by Keith Havelka.

A handwritten signature in black ink, appearing to be "Jennifer Ann Byerly", written over a horizontal line.
Jennifer Ann Byerly
Notary Public, State of Texas





Company: COG Operating
Lease/Well: Mossy Federal/No 001H
Location: Sec12 T20S R29E
Rig Name: McVay 6
State/County: New Mexico/Eddy
Latitude: 32.59, Longitude: -104.02
GRID North is 0.17 Degrees East of True North
VS-Azi: 172.36 Degrees

Depth Reference : RKB = 19 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 1/13/2015 / 14:32

VES Survey International
West Texas
(432) 583-5444

Surveyor: Noe Garza

Mossy Federal No 001H / API 30-015-42735

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	----
100.00	0.20	108.47	100.00	-0.06	0.17	0.08	0.18	108.47	0.20
200.00	0.88	86.69	199.99	-0.07	1.11	0.21	1.11	93.53	0.70
300.00	1.11	82.62	299.98	0.10	2.83	0.28	2.83	87.97	0.24
400.00	0.85	79.08	399.97	0.36	4.52	0.24	4.53	85.38	0.27
500.00	1.03	72.33	499.95	0.78	6.10	0.04	6.15	82.74	0.21
600.00	0.81	104.44	599.94	0.87	7.64	0.15	7.69	83.47	0.55
700.00	1.03	83.51	699.93	0.80	9.21	0.43	9.25	85.04	0.40
800.00	1.78	75.10	799.90	1.30	11.60	0.25	11.68	83.51	0.78
900.00	2.52	67.34	899.83	2.55	15.13	-0.51	15.35	80.45	0.80
1000.00	2.96	76.33	999.71	4.00	19.68	-1.35	20.08	78.50	0.62
1100.00	2.81	75.58	1099.58	5.23	24.56	-1.91	25.11	77.99	0.16
1200.00	2.29	36.48	1199.49	7.44	28.13	-3.64	29.10	75.18	1.78
1300.00	2.72	5.09	1299.40	11.42	29.52	-7.39	31.65	68.86	1.42
1400.00	3.18	311.78	1399.29	15.63	27.57	-11.81	31.78	60.54	2.68
1500.00	4.70	258.20	1499.08	16.64	21.59	-13.62	27.26	52.39	3.80
1600.00	4.13	228.56	1598.79	13.41	14.88	-11.32	20.04	47.97	2.32
1700.00	3.50	160.54	1698.51	8.07	13.23	-6.24	15.50	58.81	4.34
1800.00	2.77	146.38	1798.45	3.10	15.61	-0.99	15.92	78.79	1.13

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	0.68	59.17	1898.42	1.38	17.46	0.95	17.52	85.47	2.82
2000.00	1.67	17.91	1998.40	3.07	18.41	-0.60	18.67	80.53	1.24
2100.00	2.77	4.90	2088.32	8.87	19.07	-4.27	20.27	70.19	1.21
2200.00	3.42	356.29	2198.17	12.26	19.08	-9.61	22.68	57.29	0.79
2300.00	1.72	349.41	2298.07	16.70	18.62	-14.98	25.01	48.10	1.72
2400.00	1.41	201.26	2398.08	17.03	17.89	-14.50	24.70	46.41	3.01
2500.00	2.18	173.25	2498.01	13.99	17.67	-11.62	22.54	51.62	1.14
2600.00	0.37	176.96	2597.98	11.78	17.91	-9.30	21.44	56.66	1.81
2700.00	0.77	346.17	2697.98	12.11	17.77	-8.64	21.60	56.73	1.14
2800.00	1.68	353.83	2797.95	14.21	17.45	-11.77	22.51	50.83	0.92
2900.00	1.20	352.58	2897.92	16.70	17.16	-14.28	23.95	45.77	0.48
3000.00	0.66	346.79	2997.91	18.21	16.91	-15.80	24.85	42.88	0.65
3100.00	0.35	354.07	3097.90	18.99	16.77	-16.59	26.34	41.44	0.21
3200.00	0.35	324.97	3197.90	19.55	16.58	-17.18	25.62	40.27	0.18
3300.00	0.21	341.75	3297.90	19.97	16.33	-17.62	25.80	39.27	0.16
3400.00	0.14	330.96	3397.90	20.25	16.21	-17.92	25.94	38.87	0.07
3500.00	0.24	347.84	3497.90	20.57	16.11	-18.26	26.12	38.06	0.11
3600.00	0.46	341.06	3597.90	21.16	15.93	-18.85	26.48	36.98	0.22
3700.00	0.65	334.66	3697.89	22.05	15.58	-19.78	26.98	35.21	0.20
3800.00	0.78	332.38	3797.89	23.16	15.00	-20.96	27.59	32.93	0.14
3900.00	0.82	333.56	3897.88	24.41	14.37	-22.28	28.32	30.48	0.04
4000.00	0.72	329.56	3997.87	25.59	13.73	-23.54	29.04	28.21	0.11
4100.00	0.58	333.71	4097.86	26.59	13.18	-24.60	29.68	26.37	0.15
4200.00	0.67	359.80	4197.86	27.64	12.95	-25.67	30.62	25.11	0.30
4300.00	0.76	351.89	4297.85	28.88	12.86	-26.92	31.61	24.00	0.13
4400.00	0.99	353.26	4397.84	30.39	12.66	-28.44	32.93	22.62	0.22
4500.00	1.01	348.53	4497.82	32.12	12.39	-30.18	34.42	21.09	0.09
4600.00	1.12	338.50	4597.80	33.89	11.85	-32.01	35.90	19.28	0.21
4700.00	1.25	330.76	4697.78	35.75	10.96	-33.97	37.39	17.05	0.21
4800.00	1.25	330.11	4797.76	37.65	9.89	-36.00	38.93	14.71	0.01
4900.00	1.29	326.47	4897.73	39.53	8.72	-38.02	40.48	12.44	0.09
5000.00	1.48	328.30	4997.70	41.57	7.42	-40.21	42.22	10.12	0.20
5100.00	1.34	327.37	5097.67	43.65	6.11	-42.46	44.08	7.97	0.14
5200.00	1.03	318.86	5197.65	45.32	4.89	-44.26	45.58	6.16	0.35
5300.00	1.07	312.17	5297.64	46.62	3.60	-45.73	46.76	4.42	0.13
5400.00	1.15	315.63	5397.62	47.97	2.20	-47.25	48.02	2.63	0.10
5500.00	1.09	319.67	5497.60	49.41	0.89	-48.86	49.42	1.03	0.10
5600.00	1.00	317.21	5597.58	50.78	-0.33	-50.38	50.78	359.63	0.10
5700.00	0.95	300.65	5697.57	51.85	-1.63	-51.61	51.87	358.19	0.29

Measured Depth FT	Incl Angle Deg	Unit Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	0.90	304.79	5797.55	62.72	-2.99	-52.55	52.80	356.75	0.08
5900.00	0.93	306.32	5897.54	53.85	-4.29	-53.74	53.82	355.42	0.04
6000.00	1.00	302.80	5997.53	54.80	-5.68	-54.87	54.90	354.06	0.09
6100.00	0.92	292.34	6097.51	55.38	-7.15	-55.84	55.84	352.64	0.19
6200.00	0.77	276.17	6197.50	55.75	-8.55	-56.40	56.41	351.28	0.28
6300.00	0.14	356.47	6297.50	55.95	-8.23	-56.88	56.70	350.64	0.75
6400.00	0.17	18.17	6397.50	56.21	-8.19	-56.93	56.96	350.72	0.07
6500.00	0.72	82.40	6497.50	56.64	-8.58	-57.28	57.29	351.38	0.61
6600.00	0.72	91.70	6597.49	56.92	-7.40	-57.39	57.39	352.59	0.36
6700.00	0.60	77.88	6697.48	57.01	-6.26	-57.33	57.35	353.73	0.20
6800.00	0.21	65.67	6797.48	57.19	-5.58	-57.43	57.46	354.43	0.39
6900.00	0.22	299.68	6897.48	57.36	-5.58	-57.60	57.63	354.45	0.38
7000.00	0.33	293.39	6997.48	57.57	-6.01	-57.86	57.88	354.04	0.12
7100.00	0.10	252.74	7097.48	57.66	-6.36	-57.99	58.01	353.71	0.26
7200.00	1.09	221.17	7197.47	56.92	-7.07	-57.35	57.36	352.92	1.00
7300.00	1.46	227.60	7297.45	55.35	-8.63	-56.00	56.02	351.14	0.39
7400.00	1.74	234.64	7397.41	53.61	-10.81	-54.57	54.69	348.60	0.35
7500.00	1.60	241.99	7497.36	52.07	-13.28	-53.38	53.74	345.69	0.26
7600.00	1.89	251.31	7597.32	50.88	-16.07	-52.58	53.37	342.47	0.41
7651.00	1.96	261.48	7648.29	50.49	-17.74	-52.40	53.52	340.64	0.68



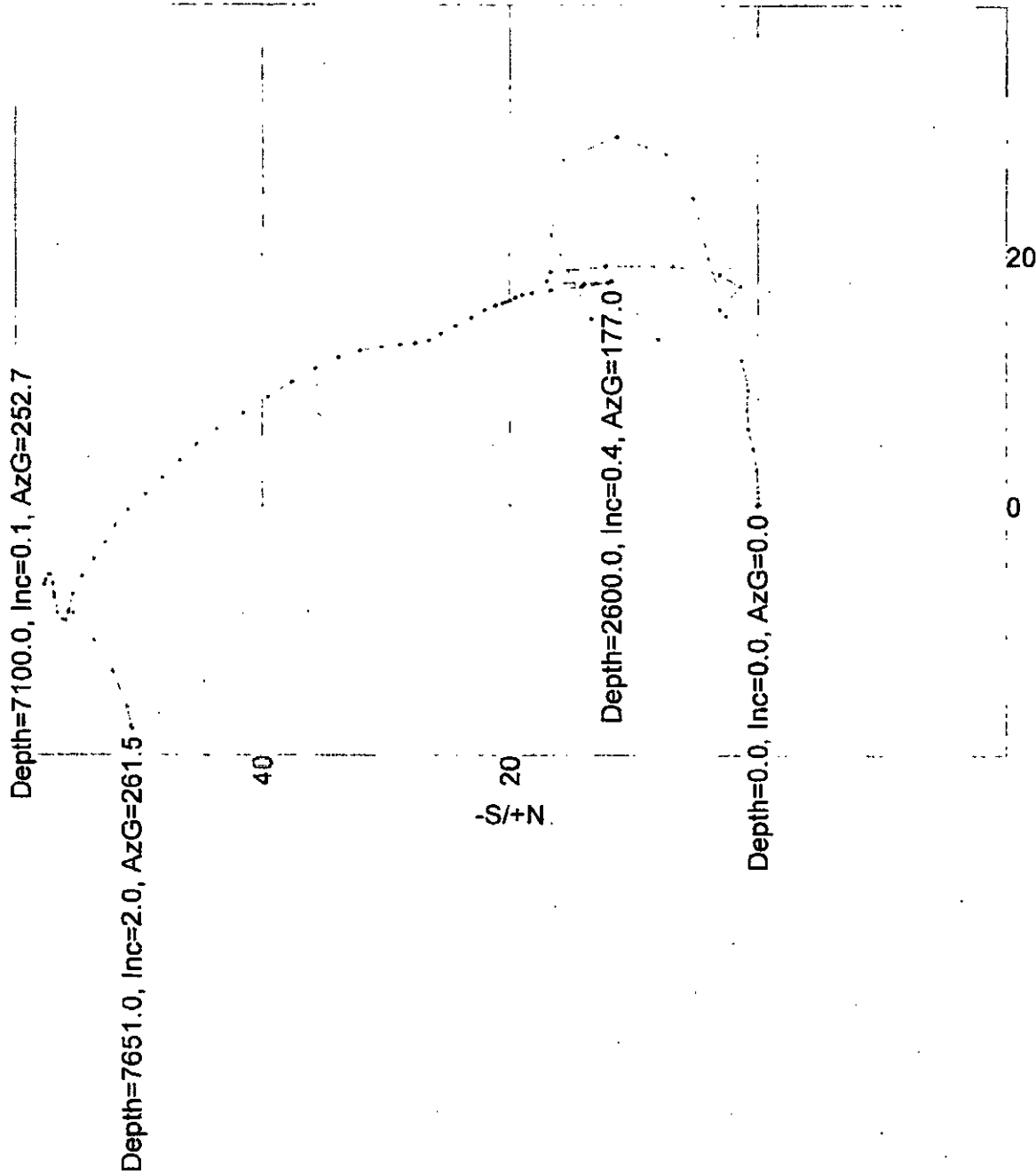
VES Survey International

West Texas

(432) 563-5444

Surveyor: Noe Garza

Mossy Federal No 001H / API 30-015-42735



-W/+E

VES Survey Date: 12/23/2014