

Submit To Appropriate District Office State Lease - 6 copies Fee Lease - 5 copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 Revised June 10, 2003
		WELL API NO. 30-015-32853
		5. Indicate Type of Lease STATE ☐ FEE ☒
		State Oil & Gas Lease No.
WELL COMPLETION OR RECOMPLETION REPORT AND LOG		
1a. Type of Well: OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER _____ b. Type of Completion: NEW ☒ WORK ☐ DEEPEN ☐ PLUG ☐ DIFF. WELL OVER ☐ BACK RESVR. ☐ OTHER _____		7. Lease Name or Unit Agreement Name Brutus Feo RECEIVED
2. Name of Operator Nadel and Gussman Permian LLC		8. Well No. 1 FFR 0 9 2004
3. Address of Operator 601 N Marienfeld, Suite 508, Midland, Texas 79701		9. Pool name or Wildcat Loving North (Morrow) OCD-ARTESIA
4. Well Location Unit Letter <u>M</u> : <u>1241</u> Feet From The <u>South</u> Line and <u>1264</u> Feet From The <u>West</u> Line Section <u>32</u> Township <u>22S</u> Range <u>28E</u> NMPM County <u>Eddy</u>		
10. Date Spudded 07/18/03	11. Date T.D. Reached 09/05/03	12. Date Compl. (Ready to Prod.) 11/12/03
13. Elevations (DF& RKB, RT, GR, etc.) GR 3051'		14. Elev. Casinghead
15. Total Depth 12,730'	16. Plug Back T.D. 12,463'	17. If Multiple Compl. How Many Morrow
18. Intervals Drilled By		Rotary Tools 100%
19. Producing Interval(s), of this completion - Top, Bottom, Name 12,254' to 12,264' Morrow		20. Was Directional Survey Made Yes
21. Type Electric and Other Logs Run Baker (Western) Atlas CBL, CZ-D, CNL, GR, DLL, MLL		21. Was Well Cored No
23. CASING RECORD (Report all strings set in well)		
CASING SIZE	WEIGHT LB./FT.	DEPTH SET
13-3/8"	48#	445'
9-5/8"	40#	6014'
5-1/2"	13.5#	12848' TD
HOLE SIZE		CEMENTING RECORD
17-1/2"		350 sx Circ.
12-1/4"		1735sx Circ.
8-3/4"		1000 sx top @ 7870'
AMOUNT PULLED		
24. LINER RECORD		25. TUBING RECORD
SIZE	TOP	SIZE
	BOTTOM	DEPTH SET
	SACKS CEMENT	PACKER SET
	SCREEN	2-7/8"
		12156'
26. Perforation record (interval, size, and number) 12,622' to 12,624' TCP guns 6spf. 12 holes CIBP @ 12,488' w/ 25' cmt 12,598'-12,604' TCP guns 6spf. 36 holes 12,254' to 12,264' 6spf. 60 holes 12,560' to 12,570' TCP guns 6spf. 60 holes		27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 12,254'-12,264' 2000 gals acid 38000 gals co2 foam 28000 2040/ boxite 12,438-12,448' 200 gallons acid 12,598' to 12,604' None 12,622'-12,624' None
28. PRODUCTION		
Date First Production 11/12/03		Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing
Well Status (Prod. or Shut-in) Prod.		
Date of Test 01/02/04	Hours Tested 24	Choke Size 18/64
Prod'n For Test Period	Oil - Bbl 0	Gas - MCF 546
Water - Bbl. 6	Gas - Oil Ratio	
Flow Tubing Press. 320	Casing Pressure 0	Calculated 24-Hour Rate
Oil - Bbl. 0	Gas - MCF 546	Water - Bbl. 6
Oil Gravity - API - (Corr.)		
29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold		Test Witnessed By <i>Ernie Little</i>
30. List Attachments Deviation Survey, Directional Survey and Wellbore Schematic		
31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief		
Signature <i>Josh Fernau</i>	Printed Name Josh Fernau	Title Staff Engineer
E-mail Address joshf@naguss.com		Date 01/28/04

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt 1,510'	T. Strawn 10,980'	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt 2,410'	T. Atoka 11,440'	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. Miss	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefec	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McCracken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Ozle
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenberger	T. Dakota	T.
T. Blinberry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Delaware Sand 2,421'	T. Todilto	T.
T. Drinkard	T. Bone Springs 5,955'	T. Entrada	T.
T. Abo	T. Morrow Lime 11,555'	T. Wingate	T.
T. Wolfcamp	T. Morrow Clastics 12,075'	T. Chinle	T.
T. Penn	T.	T. Permian	T.
T. Cisco (Bough C)	T.	T. Penn "A"	T.

OIL OR GAS
SANDS OR ZONES

No. 1, from.....to.....

No. 3, from.....to.....

No. 2, from.....to.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology
2300	2410		Salt				
2410	5955		LS, DOL, SS, SH				
5955	8870		LS, SH				
8870	9260		LS, SS, SH				
9260	11060		LS, SH				
11060	12006		LS, SH, CHT				
12006	12440		LS, SS, SH				
12440	12630		SH				

JAN 28 2004

OPERATOR: NADEL & GUSSMAN PERMIAN, LLC
WELL/LEASE: BRUTUS #1
COUNTY: EDDY

003-0019

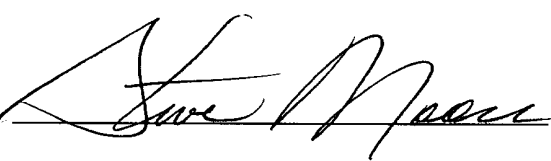
STATE OF NEW MEXICO
DEVIATION REPORT

140	3/4	5,944	3/4
289	1 1/4	6,165	1/2
411	1 3/4	6,388	1 3/4
533	1 1/4	6,449	1/2
774	3/4	6,544	3/4
1,019	3/4	6,638	1/2
1,178	1/2	6,733	3/4
1,632	2 1/2		
1,812	4 1/4		
1,875	4 1/4		
2,064	5 1/4		
2,133	4 1/2		
2,165	3 1/2		
2,189	3 1/4		
2,273	2 3/4		
2,304	2 3/4		
2,336	1 1/2		
2,367	1 1/2		
2,399	2		
2,437	1 3/4		
2,468	1 1/2		
2,500	1 1/2		
2,525	1		
2,557	1 3/4		
2,588	1 1/2		
2,651	1 3/4		
2,745	2		
2,809	1 3/4		
2,873	2 1/4		
2,942	2 1/2		
3,005	1 3/4		
3,062	2		
3,157	1 3/4		
3,280	3/4		
3,374	2		
3,469	2 1/4		
3,564	1		
3,667	1 1/4		
3,792	1 1/2		
3,952	1		
4,079	1 1/4		
4,237	1 3/4		
4,392	3/4		
4,647	3/4		
4,961	1		
5,218	1		
5,566	1/4		

RECEIVED

FEB 09 2004

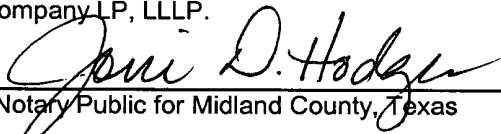
OCD-ARTESIA

By: 

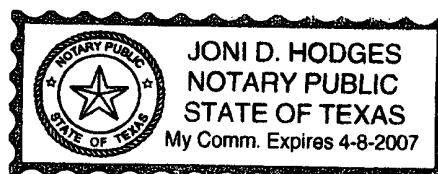
STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on this 11th day of September, 2003, by Steve Moore on behalf of Patterson-UTI Drilling Company LP, LLLP.


Notary Public for Midland County, Texas

My Commission Expires: 4/08/2007





Post Office Box 750, Conroe, Texas 77305 936-447-1036 Fax No. 936-441-7268

Nadel & Gussman Permian, LLC

Brutus No. 1
Eddy County, New Mexico

September 4, 2003

Job Number MNML03-7088

Completion Report
for
Directional Drilling Contractors, LLC



Madel & Gussman Permian, LLC
Brutus # 1

M.W.D. Operator: Robert Loginov
Directional Drillers: Terry Pearce
Magnetic Declination: 8.91
Job #: MNML-03-7088

Eddy County New Mexico

Vertical Section: 226.11

Vertical Section: Z26.11					Coordinates		Closure		DLS	
Meas. Depth	Inc.	Azm.	T.V.D.	Ver. Sect.	+N / -S	+E / -W	Dist.	Angle		
Tie - In to Gyro Data										
T	6923.00	1.77	293.51	6920.00		-29.51	109.39	113.30	105.10	1.97
1	6968.00	1.50	292.90	6964.98	-57.88	-29.00	108.21	112.03	105.00	0.60
2	7000.00	2.10	288.00	6996.97	-57.44	-28.66	107.27	111.03	104.96	1.93
3	7031.00	3.20	276.00	7027.93	-56.61	-28.39	105.87	109.61	105.01	3.96
4	7063.00	4.20	270.00	7059.87	-55.19	-28.30	103.81	107.59	105.25	3.35
5	7095.00	5.40	266.30	7091.75	-53.20	-28.40	101.13	105.04	105.68	3.87
6	7126.00	6.50	264.10	7122.59	-50.70	-28.67	97.93	102.04	106.32	3.62
7	7158.00	7.30	261.10	7154.35	-47.61	-29.17	94.12	98.54	107.22	2.74
8	7190.00	8.10	257.70	7186.06	-44.02	-29.97	89.91	94.77	108.43	2.88
9	7221.00	8.50	254.00	7216.74	-40.13	-31.06	85.57	91.04	109.95	2.15
10	7253.00	9.10	250.80	7248.36	-35.74	-32.55	80.91	87.21	111.91	2.42
11	7283.00	9.70	245.50	7277.96	-31.20	-34.38	76.37	83.75	114.23	3.51
12	7314.00	10.60	241.90	7308.48	-26.00	-36.80	71.48	80.40	117.24	3.55
13	7346.00	11.30	238.10	7339.89	-20.10	-39.85	66.22	77.28	121.04	3.14
14	7377.00	11.60	234.20	7370.28	-14.04	-43.27	61.11	74.88	125.30	2.68
15	7409.00	12.00	232.10	7401.60	-7.55	-47.20	55.88	73.14	130.19	1.83
16	7440.00	13.10	232.60	7431.86	-0.85	-51.31	50.54	72.03	135.43	3.57
17	7472.00	13.90	232.10	7462.98	6.57	-55.88	44.63	71.51	141.38	2.53
18	7500.00	14.50	231.80	7490.12	13.41	-60.11	39.22	71.77	146.88	2.16
19	7535.00	14.30	231.20	7524.02	22.07	-65.53	32.41	73.11	153.68	0.71
20	7566.00	14.00	230.70	7554.08	29.62	-70.30	26.52	75.14	159.33	1.04
21	7598.00	14.40	234.10	7585.10	37.42	-75.09	20.31	77.78	164.87	2.89
22	7630.00	14.10	235.10	7616.12	45.21	-79.65	13.89	80.85	170.11	1.21
23	7661.00	14.70	235.70	7646.14	52.82	-84.03	7.54	84.37	174.87	1.99
24	7693.00	15.90	235.80	7677.01	61.15	-88.78	0.56	88.78	179.64	3.75
25	7724.00	16.70	233.70	7706.76	69.75	-93.80	-6.54	94.03	183.99	3.21
26	7756.00	17.50	231.20	7737.35	79.10	-99.54	-14.00	100.52	188.00	3.39
27	7787.00	17.90	231.80	7766.88	88.48	-105.41	-21.37	107.55	191.46	1.42
28	7819.00	18.10	233.20	7797.31	98.31	-111.43	-29.22	115.19	194.69	1.49
29	7850.00	18.70	233.40	7826.73	108.01	-117.27	-37.06	122.99	197.54	1.95
30	7882.00	18.40	233.60	7857.07	118.11	-123.33	-45.25	131.37	200.15	0.96
31	7914.00	18.30	234.10	7887.44	128.09	-129.27	-53.38	139.86	202.44	0.58
32	7945.00	18.00	233.70	7916.90	137.66	-134.96	-61.18	148.18	204.39	1.05
33	8008.00	18.60	232.10	7976.71	157.30	-146.90	-76.96	165.83	207.65	1.24
34	8040.00	18.10	230.50	8007.08	167.33	-153.19	-84.82	175.11	208.97	2.22
35	8072.00	18.00	229.80	8037.51	177.22	-159.55	-92.43	184.39	210.09	0.75
36	8103.00	17.50	230.40	8067.03	186.65	-165.61	-99.68	193.29	211.04	1.72
37	8135.00	16.90	229.30	8097.60	196.09	-171.71	-106.92	202.27	211.91	2.13
38	8166.00	16.80	230.10	8127.27	205.06	-177.52	-113.77	210.85	212.65	0.81
39	8198.00	16.10	230.10	8157.96	214.10	-183.33	-120.72	219.51	213.36	2.19
40	8229.00	16.50	231.10	8187.72	222.77	-188.85	-127.44	227.83	214.01	1.58
41	8261.00	17.20	232.20	8218.34	232.01	-194.61	-134.72	236.69	214.69	2.40
42	8293.00	18.30	233.60	8248.82	241.69	-200.49	-142.50	245.97	215.40	3.69
43	8324.00	17.90	234.00	8278.28	251.24	-206.18	-150.27	255.13	216.09	1.35
44	8356.00	17.50	234.20	8308.77	260.87	-211.88	-158.15	264.40	216.74	1.26
45	8391.00	17.80	230.30	8342.12	271.42	-218.38	-166.54	274.64	217.33	3.48
46	8422.00	17.70	228.90	8371.65	280.85	-224.50	-173.74	283.88	217.74	1.41
47	8455.00	18.50	229.50	8403.01	291.09	-231.20	-181.50	293.93	218.13	2.49
48	8486.00	18.70	229.30	8432.39	300.96	-237.64	-189.00	303.63	218.50	0.68
49	8517.00	18.80	230.10	8461.75	310.90	-244.08	-196.60	313.41	218.85	0.89



Madel & Gussman Permian, LLC
Brutus # 1

M.W.D. Operator: Robert Loginov
Directional Drillers: Terry Pearce
Magnetic Declination: 8.91
Job #: MNML-03-7088

Eddy County New Mexico

Vertical Section: 226.11

Vertical Section: Z26.11						Coordinates		Closure		
Meas. Depth	Inc.	Azm.	T.V.D.	Ver. Sect.		+N / -S	+E / -W	Dist.	Angle	DLS
50	8548.00	18.70	231.00	8491.10	320.84	-250.41	-204.30	323.18	219.21	0.99
51	8580.00	18.50	231.70	8521.43	331.00	-256.79	-212.27	333.16	219.58	0.94
52	8610.00	18.30	232.10	8549.90	340.42	-262.63	-219.72	342.42	219.92	0.79
53	8642.00	17.90	232.10	8580.32	350.31	-268.74	-227.57	352.14	220.26	1.25
54	8674.00	17.80	230.70	8610.78	360.08	-274.86	-235.23	361.77	220.56	1.38
55	8706.00	17.60	230.40	8641.26	369.78	-281.04	-242.74	371.36	220.82	0.69
56	8738.00	17.50	230.20	8671.77	379.40	-287.20	-250.17	380.88	221.06	0.36
57	8770.00	17.70	230.50	8702.27	389.05	-293.38	-257.62	390.43	221.29	0.69
58	8801.00	17.60	230.90	8731.81	398.42	-299.33	-264.89	399.71	221.51	0.51
59	8832.00	17.40	231.00	8761.38	407.71	-305.20	-272.13	408.90	221.72	0.65
60	8896.00	18.00	232.70	8822.35	427.06	-317.22	-287.43	428.07	222.18	1.24
61	8927.00	17.90	233.20	8851.84	436.55	-322.97	-295.06	437.46	222.41	0.59
62	8990.00	18.80	232.40	8911.64	456.25	-334.97	-310.85	456.98	222.86	1.48
63	9022.00	18.70	230.60	8941.94	466.49	-341.37	-318.90	467.15	223.05	1.83
64	9053.00	19.00	231.10	8971.28	476.47	-347.69	-326.67	477.08	223.21	1.10
65	9116.00	18.70	229.30	9030.90	496.77	-360.72	-342.31	497.29	223.50	1.04
66	9148.00	18.50	227.60	9061.23	506.97	-367.49	-349.95	507.45	223.60	1.81
67	9179.00	17.90	227.00	9090.68	516.65	-374.05	-357.06	517.12	223.67	2.03
68	9211.00	17.50	226.40	9121.16	526.37	-380.72	-364.14	526.83	223.72	1.37
69	9241.00	17.80	227.00	9149.75	535.47	-386.96	-370.76	535.92	223.78	1.17
70	9273.00	17.90	227.30	9180.21	545.28	-393.63	-377.96	545.71	223.84	0.42
71	9336.00	17.10	228.1	9240.29	564.21	-406.38	-391.96	564.61	223.97	1.33
72	9368.00	16.70	227.80	9270.91	573.51	-412.61	-398.87	573.89	224.03	1.28
73	9399.00	16.40	227.80	9300.63	582.34	-418.55	-405.41	582.70	224.09	0.97
74	9431.00	16.50	227.90	9331.32	591.40	-424.63	-412.13	591.74	224.14	0.32
75	9494.00	15.20	228.70	9391.92	608.59	-436.08	-424.98	608.91	224.26	2.09
76	9526.00	15.20	230.30	9422.80	616.96	-441.52	-431.36	617.26	224.33	1.31
77	9558.00	14.70	229.40	9453.72	625.20	-446.85	-437.67	625.48	224.41	1.72
78	9622.00	14.40	229.60	9515.66	641.25	-457.29	-449.89	641.49	224.53	0.48
79	9653.00	13.90	228.40	9545.72	648.82	-462.26	-455.61	649.05	224.59	1.87
80	9685.00	13.80	229.30	9576.79	656.47	-467.30	-461.38	656.69	224.63	0.74
81	9717.00	13.80	230.10	9607.87	664.09	-472.24	-467.20	664.29	224.69	0.60
82	9812.00	11.30	232.30	9700.59	684.65	-485.20	-483.26	684.80	224.89	2.68
83	9842.00	11.00	232.10	9730.03	690.42	-488.75	-487.84	690.56	224.95	1.01
84	9875.00	10.60	231.10	9762.44	696.57	-492.59	-492.69	696.70	225.01	1.34
85	9938.00	9.20	230.90	9824.50	707.36	-499.41	-501.11	707.47	225.10	2.22
86	9970.00	8.90	230.30	9856.10	712.38	-502.60	-505.00	712.48	225.14	0.98
87	10002.00	9.00	228.50	9887.71	717.35	-505.84	-508.78	717.45	225.17	0.93
88	10033.00	9.10	226.20	9918.33	722.22	-509.15	-512.36	722.32	225.18	1.21
89	10065.00	9.60	225.60	9949.90	727.42	-512.77	-516.10	727.52	225.19	1.59
90	10097.00	9.90	225.60	9981.44	732.84	-516.56	-519.97	732.94	225.19	0.94
91	10128.00	9.70	226.30	10011.99	738.12	-520.23	-523.76	738.21	225.19	0.75
92	10160.00	9.60	227.10	10043.54	743.48	-523.90	-527.66	743.58	225.20	0.52
93	10191.00	9.30	226.30	10074.12	748.57	-527.39	-531.37	748.66	225.21	1.06
94	10223.00	9.20	226.50	10105.70	753.72	-530.94	-535.09	753.81	225.22	0.33
95	10254.00	9.00	226.6	10136.31	758.62	-534.31	-538.65	758.71	225.23	0.65
96	10286.00	8.70	227.00	10167.93	763.54	-537.68	-542.24	763.63	225.24	0.96
97	10318.00	8.10	225.60	10199.58	768.22	-540.91	-545.62	768.30	225.25	1.98
98	10350.00	7.80	225.50	10231.28	772.64	-544.01	-548.78	772.73	225.25	0.94
99	10381.00	7.50	223.40	10262.00	776.77	-546.96	-551.67	776.85	225.25	1.32



Madel & Gussman Permian, LLC
Brutus # 1

M.W.D. Operator: Robert Loginov
Directional Drillers: Terry Pearce
Magnetic Declination: 8.91
Job #: MNML-03-7088

Eddy County New Mexico

Vertical Section: 226.11

Vertical Section: 226.11

	Meas. Depth	Inc.	Azm.	T.V.D.	Ver. Sect.	Coordinates		Closure		DLS
						+N / -S	+E / -W	Dist.	Angle	
100	10413.00	7.40	224.00	10293.73	780.91	-549.96	-554.54	781.00	225.24	0.40
101	10476.00	7.30	229.90	10356.21	788.96	-555.45	-560.42	789.05	225.25	1.21
102	10507.00	6.60	230.40	10386.99	792.70	-557.86	-563.30	792.78	225.28	2.27
103	10538.00	6.20	231.60	10417.79	796.14	-560.03	-565.98	796.22	225.30	1.36
104	10570.00	5.90	230.90	10449.61	799.50	-562.14	-568.61	799.58	225.33	0.97
105	10633.00	4.80	229.10	10512.34	805.36	-565.91	-573.12	805.43	225.36	1.77
105	10665.00	4.50	226.80	10544.23	807.95	-567.65	-575.04	808.02	225.37	1.10
107	10697.00	4.30	225.20	10576.14	810.41	-569.35	-576.81	810.48	225.37	0.73
108	10728.00	4.40	227.80	10607.05	812.76	-570.97	-578.52	812.83	225.38	0.71
109	10791.00	3.60	229.60	10669.90	817.15	-573.87	-581.81	817.21	225.39	1.29
110	10855.00	2.70	235.20	10733.80	820.64	-576.04	-584.58	820.70	225.42	1.48
111	10886.00	2.40	237.30	10764.77	822.00	-576.80	-585.73	822.06	225.44	1.01
112	10918.00	2.20	237.90	10796.74	823.26	-577.49	-586.81	823.31	225.46	0.63
113	10950.00	2.30	241.40	10828.72	824.48	-578.13	-587.90	824.53	225.48	0.53
114	11013.00	1.30	241.30	10891.69	826.39	-579.07	-589.63	826.43	225.52	1.59
115	11073.00	0.90	252.10	10951.68	827.47	-579.55	-590.68	827.51	225.54	0.75
Pri	11118.00	0.90	252.10	10996.67	828.11	-579.76	-591.35	828.14	225.57	0.00

September 4, 2003

Nadel & Gussman Permian, LLC
Brutus No. 1
Eddy County, New Mexico

This is to certify surveys from 6968' MD to a depth of 11073' MD are true and correct MWD Surveys.
These surveys were taken from 08/10/03 thru 08/23/03.

Sincerely,



Karen Murphey
Operations Manager

NADEL AND GUSSMAN PERMIAN

Brutus No. 1

Surf 1241' FSL, 1264' FWL BHL 660 FSL 660 FWL Sec 32, 22S, 28E ,Eddy County, NM

API # 30 - 015 - 32853-00

Elev: 3051', KB: 3069'

Current

13-3/8", 48#, H-40 @ 445'
350 sx, cement circulated 50 sxs
17-1/2" hole

9-5/8", 40#, L-80 @ 6014'
1535 sx, cement circulate 140 sxs
Cmt fell back 1" w/ 200 sxs from 420'
12-1/4" hole

Tubing Details
2-7/8 " 6.5 ppf L-80 0-12,112'
10' tbg sub 12,112-12,122
1 jt 2-7/8 " tbg 12,122-12,154'
2.25 F on-off tool 12,154-12,156
Packer Arrowsmith 10K 12,156
10' tbg sub 12,158-12,168
2.25 F nipple 12,169

TOC @ 7870'

Arrow Smith 10 K packer @ ± 12,156 MD
Morrow Perfs:
12,254-12,264' MD 6 spf 60 holes
12,134-12,144' TVD

CIBP @ 12,488' cap w/ 25' cmt.

Morrow Perfs: 12,560' - 12,570' MD 60 holes
12,438-12,448 TVD

CIBP @ 12,590' cap w/ 5' sand.

L. Morrow Perfs
12,598-12, 604' MD 36 holes
12,374-12,380 TVD
12,622' - 12,624' MD 12 holes
12,400'-12,402' TVD

5-1/2", 17#, SP-110 LTC @ 0-12,850' MD
12,730 TVD
1000 sxs Class H 13 ppg
Est TOC 8500'
7-7/8" hole

EST PBTD @ 12,463' MD

TD @ 12,848' MD 12,
730 TVD