

Results of Directional Survey

API number:	30-025-40697		
OGRID:		Operator:	NEARBURG PRODUCING CO
		Property:	LAGUNA 23 FEDERAL # 2H

surface	ULSTR:	M	23	T 20S	R 34E
				50 FSL	630 FWL

BH Loc	ULSTR:	D	23	T 20S	R 34E
15689	MD	11079.3	TVD	341 FNL	612 FWL
4939 FSL					

Top Perf/OH	ULSTR:	M	23	T 20S	R 34E
11030	MD	10968.0	TVD	320 FSL	672 FWL

Bot Perf/OH	ULSTR:	D	23	T 20S	R 34E
15635	MD	11078.4	TVD	395 FNL	612 FWL
4885 FSL					

	MD	N/S	E/W	VD
	11002	249.32	41.74	10948.65
TOP PERFS/OH	11030	269.59	42.16	10967.95
	11033	271.76	42.20	10970.02
	15619	4819.32	-18.45	11078.09
BOT PERFS/OH	15635	4835.32	-18.26	11078.36
	15689	4889.30	-17.61	11079.27

NEXT TO LAST	15619	4819.32	-18.45	11078.09
LAST READING	15689	4889.30	-17.61	11079.27
TD	15689	4889.30	-17.61	11079.27

Surface Location	50	FS	630	FW
Projected BHL	4939	FS	612	FW
Location of				
Top Perfs/OH	320	FS	672	FW
Bottom Perfs/OH	4885	FS	612	FW

SUMMARY of Subsurface Locations

Surface Location	M-23-20S-34E	50	FS	630	FW	Vert. Depth
Top Perfs/OH	M-23-20S-34E	320	FS	672	FW	10967.95
Bottom Perfs/OH	D-23-20S-34E	4885	FS	612	FW	11078.36
Projected TD	D-23-20S-34E	4939	FS	612	FW	11079.27

Reservoir Development
PathFinder, a Schlumberger Company
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519



February 13, 2014

Cimarex
600 N MARIENFELD STREET SUITE 600

MIDLAND, TX 79701

HOBBS OCD

SEP 17 2014

RECEIVED

M-23-S23-T20S-R34E 175 FSL 660 FWL
N 32.551726 W 103.536874

Re:

CLIENT: Nearburg Producing Company
WELL: Laguna 23 Federal Com 2H ST01
FIELD: Lea Bone Spring South
RIG: NorAm 26
COUNTY: Lea
API NO: 30-025-40697-01
JOB NO: 14MLD0048

Enclosed, please find the original copy of the survey performed on the referenced well by PathFinder, a division of Schlumberger Technology Corporation.
Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Jesse White MWD	Laguna 23 Federal Com 2H ST01 Side Track	10499.00 Ft to 15619.00 Ft	February 5, 2014 to February 11, 2014	SlimPulse

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Jasem Alharer
Field Service Manager

Reservoir Development

PathFinder, a Schlumberger Company
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519

PATHFINDER
A Schlumberger Company

Well Reference:

M-23-S23-T20S-R34E 175 FSL 660 FWL
N 32.551726 W 103.536874

I, Jesse White certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of February 05, 2014 through February 11, 2014, conduct or supervise the taking of the SlimPulse surveys from a depth of 10499.00 feet to a depth of 15619.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Nearburg Producing Company for the Laguna 23 Federal Com 2H ST01 Well (Side Track) API No. 30-025-40697-01 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By
Jesse White
MWD

Jesse White

Subscribed and Sworn to before me this 13th day of February (month) 2014 (yr)

My Commission expires:

September 5, 2016

Michelle Ellwood

Notary Public

Midland, TX

(County State)



SCHLUMBERGER
Survey Report

24-Feb-2014

Client.....: Nearburg Producing Company
Field.....: Lea Bone Spring South

Well.....: Laguna 23 Federal Com 2H
API number.....: 30-025-40697-01
Engineer.....: J. White

Spud date.....: 11-Jan-14
Last survey date.....: 11-Feb-14
Total accepted surveys...: 120
MD of first survey.....: 10499.00 ft
MD of last survey.....: 15619.00 ft

County.....: Lea
State.....: New Mexico
Rig.....: NorAm 26

Latitude.....: 32° 33' 5.427" N
Longitude.....: 103° 32' 14.849" W

----- Survey calculation methods-----

Method for positions...: Minimum curvature
Method for DLS.....: Lubinski

----- Depth reference -----

Permanent datum.....: MSL
Depth reference.....: Driller's Depth
GL above permanent.....: 3680.00
KB above permanent.....: 3705.00
DF above permanent.....: 3705.00

----- Vertical section origin-----

Latitude (+N/S-).....: 0.00 ft
Departure (+E/W-).....: 0.00 ft

----- Grid Coordinates -----

NAD27 Texas State Plane, Central Zone, US Feet
X.....: 7865664.50 ft
Y.....: 565285.50 ft

Azimuth from Vsect Origin to target: 359.87 degrees

-----MWD Survey Reference Criteria-----

-----Run1----- Calculation Date: 30-Jan-2014
Location G.....: 998.85467 mgn Tolerance G...: 2.50 mgn
Location B.....: 48536.13 nT Tolerance B...: 300.00 nT
Magnetic Dip: 60.41923 degrees Tolerance Dip: 0.45 degrees

-----Run2----- Calculation Date: 4-Feb-2014
Location G.....: 998.85467 mgn Tolerance G...: 2.50 mgn
Location B.....: 48534.53 nT Tolerance B...: 300.00 nT
Magnetic Dip: 60.4188 degrees Tolerance Dip: 0.45 degrees

BGGM Model: 2013

-----Run1-----
Magnetic dec (+E/W-).....: 7.38281 degrees
Grid Conv (+E/W-).....: 0.42825 degrees
Total Azim Corr (+E/W-)..: 6.95456 degrees

-----Run2-----
Magnetic dec (+E/W-).....: 7.38128 degrees
Grid Conv (+E/W-).....: 0.42825 degrees
Total Azim Corr (+E/W-)..: 6.95303 degrees

-----Survey Correction Index Description-----

0 = Uncorrected 1 = Sag Corrected
2 = DMAG Corrected 3 = Sag + DMAG Corrected

===== Survey List =====													
Seq	MD (ft)	Incl (deg)	Azim (deg)	Course (ft)	TVD (ft)	V Sec (ft)	N/-S (ft)	E/-W (ft)	Closure (ft)	at Azi (deg)	DLS (deg/100ft)	Tool	Correction
1	0.00	0.00	0.00	-999.25	0.00	0.00	0.00	0.00	0	90.00	0.00	TIP	0
2	130.00	0.50	0.00	130.00	130.00	0.57	0.57	0.00	0.56723	360.00	0.38	Other	0
3	529.00	0.75	0.00	399.00	528.97	4.92	4.92	0.00	4.91955	360.00	0.06	Other	0
4	1000.00	1.00	0.00	471.00	999.92	12.11	12.11	0.00	12.11221	360.00	0.05	Other	0
5	1481.00	1.00	0.00	481.00	1480.85	20.51	20.51	0.00	20.50681	360.00	0.00	Other	0
6	1900.00	1.00	0.00	419.00	1899.78	27.82	27.82	0.00	27.81937	360.00	0.00	Other	0
7	2300.00	0.75	0.00	400.00	2299.73	33.93	33.93	0.00	33.92778	360.00	0.06	Other	0
8	2800.00	0.75	0.00	500.00	2799.69	40.47	40.47	0.00	40.47258	360.00	0.00	Other	0
9	3280.00	1.00	0.00	480.00	3279.64	47.80	47.80	0.00	47.80267	360.00	0.05	Other	0
10	3752.00	1.00	0.00	472.00	3751.56	56.04	56.04	0.00	56.04021	360.00	0.00	Other	0

11	4232.00	1.00	0.00	480.00	4231.49	64.42	64.42	0.00	64.41736	360.00	0.00	Other	0
12	4655.00	0.75	0.00	423.00	4654.44	70.88	70.88	0.00	70.87701	360.00	0.06	Other	0
13	5035.00	1.50	0.00	380.00	5034.37	78.34	78.34	0.00	78.33776	360.00	0.20	Other	0
14	5422.00	1.00	0.00	387.00	5421.27	86.78	86.78	0.00	86.78009	360.00	0.13	Other	0
15	5549.00	1.32	145.02	127.00	5548.26	86.69	86.69	0.84	86.69381	0.55	1.74	Other	0
16	5737.00	1.10	147.35	188.00	5736.22	83.39	83.40	3.05	83.452	2.10	0.12	Other	0
17	5926.00	1.41	147.05	189.00	5925.17	79.91	79.92	5.30	80.09269	3.79	0.16	Other	0
18	6116.00	1.32	140.45	190.00	6115.12	76.25	76.27	7.96	76.68274	5.96	0.10	Other	0
19	6305.00	1.32	142.43	189.00	6304.07	72.84	72.86	10.68	73.64216	8.34	0.02	Other	0
20	6493.00	1.58	150.43	188.00	6492.01	68.86	68.89	13.28	70.16096	10.91	0.17	Other	0
21	6672.00	1.49	165.63	179.00	6670.95	64.46	64.49	15.07	66.23027	13.15	0.23	Other	0
22	6864.00	1.49	175.52	192.00	6862.88	59.55	59.59	15.88	61.66714	14.93	0.13	Other	0
23	7057.00	1.58	170.95	193.00	7055.81	54.42	54.46	16.50	56.90155	16.86	0.08	Other	0
24	7248.00	1.71	169.33	191.00	7246.73	49.02	49.06	17.44	52.06426	19.57	0.07	Other	0
25	7342.00	1.58	174.73	94.00	7340.69	46.35	46.39	17.82	49.69236	21.01	0.22	Other	0
26	7530.00	1.80	171.52	188.00	7528.61	40.84	40.89	18.49	44.87401	24.34	0.13	Other	0
27	7720.00	1.80	157.86	190.00	7718.52	35.13	35.17	20.06	40.48827	29.70	0.23	Other	0
28	7908.00	1.49	196.66	188.00	7906.45	30.05	30.09	20.47	36.39602	34.22	0.60	Other	0
29	8003.00	0.88	215.66	95.00	8001.43	28.27	28.32	19.69	34.49099	34.81	0.76	Other	0
30	8096.00	0.70	260.34	93.00	8094.42	27.60	27.64	18.71	33.3815	34.10	0.67	Other	0
31	8190.00	0.88	250.14	94.00	8188.41	27.26	27.30	17.47	32.41157	32.61	0.24	Other	0
32	8379.00	1.10	37.22	189.00	8377.39	28.30	28.33	15.12	32.11595	28.09	0.66	Other	0
33	8569.00	0.40	14.73	190.00	8567.37	30.48	30.51	14.30	33.69433	25.12	0.46	Other	0
34	8757.00	0.79	5.06	188.00	8755.36	32.40	32.43	14.58	35.56169	24.21	0.21	Other	0
35	8947.00	1.01	104.02	190.00	8945.35	33.30	33.33	16.32	37.11542	26.09	0.72	Other	0
36	9136.00	1.49	96.16	189.00	9134.30	32.62	32.67	20.38	38.50959	31.97	0.27	Other	0
37	9229.00	0.79	68.73	93.00	9227.28	32.72	32.77	22.18	39.57095	34.10	0.93	Other	0
38	9418.00	1.19	58.32	189.00	9416.26	34.21	34.27	25.07	42.46096	36.18	0.23	Other	0
39	9606.00	1.19	49.84	188.00	9604.22	36.49	36.56	28.22	46.18175	37.67	0.09	Other	0
40	9796.00	0.88	61.84	190.00	9794.18	38.45	38.52	31.02	49.45186	38.84	0.20	Other	0
41	9985.00	1.32	79.63	189.00	9983.15	39.52	39.59	34.44	52.47384	41.01	0.29	Other	0
42	10172.00	0.62	137.95	187.00	10170.13	39.15	39.23	37.23	54.0857	43.50	0.80	Other	0
43	10361.00	0.70	182.33	189.00	10359.11	37.23	37.32	37.87	53.16719	45.42	0.27	Other	0
44	10499.00	6.54	8.59	138.00	10496.84	44.17	44.26	39.01	58.99586	41.40	5.24	SlimPulse	0
45	10531.00	9.55	10.71	32.00	10528.52	48.58	48.67	39.78	62.8556	39.26	9.45	SlimPulse	0
46	10562.00	13.12	9.75	31.00	10558.91	54.57	54.67	40.85	68.24324	36.77	11.53	SlimPulse	0
47	10588.00	20.30	7.10	31.00	10588.89	62.37	62.46	42.98	83.92437	30.72	10.59	SlimPulse	0
48	10625.00	19.06	3.66	32.00	10619.38	72.05	72.14	41.88	93.22159	27.74	9.12	SlimPulse	0
49	10656.00	20.05	2.04	31.00	10648.59	82.41	82.51	43.39	103.27012	25.07	3.64	SlimPulse	0
50	10688.00	20.30	1.85	32.00	10678.62	93.44	93.54	43.76	113.25983	22.80	0.81	SlimPulse	0
51	10719.00	20.91	359.73	31.00	10707.64	104.34	104.44	43.91	124.32377	20.53	7.38	SlimPulse	0
52	10751.00	23.10	357.40	32.00	10737.31	116.33	116.43	43.60	136.10221	18.39	7.55	SlimPulse	0
53	10782.00	25.43	356.71	31.00	10765.57	129.05	129.15	42.94	149.52901	16.38	7.34	SlimPulse	0
54	10814.00	27.77	357.18	32.00	10794.18	143.36	143.46	42.18	163.50916	14.69	3.80	SlimPulse	0
55	10845.00	28.94	357.30	31.00	10821.46	158.07	158.16	41.47	178.75542	13.22	5.69	SlimPulse	0
56	10877.00	30.66	358.54	32.00	10849.23	173.96	174.05	40.90	194.88079	12.06	10.45	SlimPulse	0
57	10908.00	33.79	0.08	31.00	10875.45	190.49	190.58	40.71	212.42416	11.10	9.31	SlimPulse	0
58	10939.00	36.63	1.02	31.00	10900.77	208.36	208.45	40.89	232.06542	10.25	11.67	SlimPulse	0
59	10971.00	40.36	1.30	32.00	10925.81	228.27	228.36	41.74	250.20448	8.21	9.84	SlimPulse	0
60	11002.00	44.75	1.15	31.00	10948.65	249.22	249.32	41.74	275.01884	8.83	10.72	SlimPulse	0
61	11033.00	48.07	1.21	31.00	10970.02	271.67	271.76	42.20	299.20448	6.67	10.04	SlimPulse	0
62	11065.00	51.22	1.24	32.00	10990.74	296.04	296.14	43.16	323.931	7.66	14.67	SlimPulse	0
63	11096.00	55.75	0.77	31.00	11009.18	320.94	321.04	43.16	350.79683	7.12	12.29	SlimPulse	0
64	11128.00	59.68	0.68	32.00	11026.26	347.99	348.09	43.50	377.81581	6.67	10.65	SlimPulse	0
65	11159.00	62.78	0.98	31.00	11041.18	375.16	375.26	43.89	405.55314	6.26	10.81	SlimPulse	0
66	11191.00	66.19	0.76	32.00	11054.96	404.03	404.13	44.33	435.02741	5.89	7.48	SlimPulse	0
67	11222.00	68.49	0.45	31.00	11066.91	432.63	432.73	44.63	464.87904	5.50	8.18	SlimPulse	0
68	11254.00	70.88	359.30	32.00	11078.02	462.64	462.74	44.56	494.20195	5.08	10.91	SlimPulse	0
69	11285.00	73.81	357.54	31.00	11087.42	492.16	492.26	43.74	524.90918	4.62	10.49	SlimPulse	0
70	11317.00	77.14	357.13	32.00	11095.44	523.10	523.20	42.30	555.07996	4.24	10.03	SlimPulse	0
71	11348.00	80.14	357.96	31.00	11101.54	553.47	553.56	41.00	609.22701	3.50	7.42	SlimPulse	0
72	11380.00	83.18	359.01	32.00	11106.19	585.12	585.21	40.17	622.31904	3.66	8.77	SlimPulse	0
73	11416.00	86.28	359.56	36.00	11109.49	620.96	621.05	39.72	680.17117	3.34	5.35	SlimPulse	0
74	11443.00	88.25	359.96	27.00	11110.78	647.93	648.02	39.60	769.0564	2.99	1.20	SlimPulse	0
75	11474.00	89.86	0.34	31.00	11111.29	678.92	679.01	39.68	862.91648	2.66	0.86	SlimPulse	0
76	11563.00	90.93	0.26	89.00	11110.68	767.91	768.01	40.14	957.70687	2.29	1.38	SlimPulse	0
77	11657.00	91.41	359.60	94.00	11108.76	861.89	861.99	40.03	1051.39411	1.88	1.35	SlimPulse	0
78	11752.00	91.37	358.29	95.00	11106.45	956.85	956.94	38.28	1145.01442	1.46	0.56	SlimPulse	0
79	11846.00	91.61	357.04	94.00	11104.00	1050.75	1050.83	34.45	1239.63634	1.07	0.19	SlimPulse	0
80	11940.00	91.62	356.51	94.00	11101.35	1144.57	1144.64	29.17	1333.27472	0.73	0.43	SlimPulse	0
81	12035.00	91.69	356.34	95.00	11098.62	1239.36	1239.42	23.24	1427.89414	0.39	0.57	SlimPulse	0
82	12129.00	91.58	355.95	94.00	11093.32	1333.13	1333.17	16.92	1521.58029	0.11	0.95	SlimPulse	0
83	12224.00	91.58	355.41	95.00	11089.34	1427.83	1427.86	9.76	1615.3995	359.92	1.12	SlimPulse	0
84	12318.00	91.61	356.30	94.00	11090.69	1521.57	1521.58	2.97	1710.31335	359.81	1.21	SlimPulse	0
85	12412.00	91.44	357.34	94.00	11088.19	1615.40	1615.40	-2.24	1804.26964	359.76	0.78	SlimPulse	0
86	12507.00	91.41	358.49	95.00	11085.82	1710.31	1710.30	-5.70	1993.16537	359.84	1.46	SlimPulse	0
87	12601.00	91.51	359.21	94.00	11083.43	1804.27	1804.25	-7.59	2087.07212	359.95	1.62	SlimPulse	0
88	12695.00	91.48	0.66	94.00	11080.97	1993.17	1993.16	-5.45	2182.01993	0.04	1.44	SlimPulse	0
89	12790.00	91.51	2.05	95.00	11078.49	1993.17	1993.16	-7.69	2276.01505	0.05	1.69	SlimPulse	0
90	12884.00	90.07	2.52	94.00	11077.19	2087.07	2087.07	-1.70	2371.00646	0.02	0.69	SlimPulse	0
91	12979.00	89.79	1.18	95.00	11077.31	2182.02	2182.02	2.03					
92	13073.00	90.14	359.63	94.00	11077.36	2276.00	2276.01	0.88					
93	13168.00	90.17	358.98	95.00	11077.11	2371.00	2371.01						

94	13263.00	90.34	358.79	95.00	11076.68	2465.98	2465.99	-0.97	2465.98753	359.98	0.27	SlimPulse	0
95	13337.00	90.48	357.73	94.00	11076.00	2559.94	2559.94	-3.82	2559.94305	359.91	1.15	SlimPulse	0
96	13451.00	89.90	357.16	94.00	11075.69	2653.86	2653.85	-8.02	2653.85744	359.83	0.87	SlimPulse	0
97	13566.00	90.07	357.22	95.00	11075.72	2748.75	2748.73	-12.68	2748.76012	359.74	0.19	SlimPulse	0
98	13640.00	90.07	357.30	94.00	11075.61	2842.65	2842.62	-17.17	2842.67512	359.65	0.99	SlimPulse	0
99	13735.00	90.55	358.12	95.00	11075.10	2937.58	2937.54	-20.97	2937.61969	359.59	0.99	SlimPulse	0
100	13829.00	89.86	357.65	94.00	11074.82	3031.53	3031.48	-24.44	3031.57775	359.54	0.88	SlimPulse	0
101	13924.00	90.07	357.92	95.00	11074.82	3126.46	3126.41	-28.12	3126.53436	359.48	0.56	SlimPulse	0
102	14018.00	89.93	359.37	94.00	11074.82	3220.44	3220.38	-30.34	3220.52198	359.46	1.55	SlimPulse	0
103	14112.00	90.10	0.77	94.00	11074.79	3314.44	3314.38	-30.22	3314.51438	359.48	1.50	SlimPulse	0
104	14206.00	89.93	1.98	94.00	11074.76	3408.40	3408.35	-27.96	3408.46232	359.53	1.30	SlimPulse	0
105	14301.00	90.62	2.72	95.00	11074.30	3503.31	3503.27	-24.07	3503.34812	359.61	1.06	SlimPulse	0
106	14395.00	90.89	4.58	94.00	11073.06	3597.09	3597.06	-18.09	3597.10831	359.71	2.00	SlimPulse	0
107	14480.00	90.96	7.28	95.00	11071.52	3691.54	3691.53	-8.28	3691.54287	359.87	2.85	SlimPulse	0
108	14584.00	89.76	5.12	94.00	11070.93	3784.96	3784.97	1.87	3784.97525	0.03	2.63	SlimPulse	0
109	14678.00	90.65	0.30	94.00	11070.59	3878.82	3878.84	6.31	3878.84559	0.09	5.21	SlimPulse	0
110	14773.00	91.00	358.94	95.00	11069.23	3973.80	3973.83	5.68	3973.83022	0.08	1.48	SlimPulse	0
111	14867.00	89.59	359.16	94.00	11068.75	4067.79	4067.81	4.12	4067.81168	0.06	1.52	SlimPulse	0
112	14962.00	89.21	358.93	95.00	11068.74	4162.77	4162.79	2.54	4162.79164	0.03	0.47	SlimPulse	0
113	15056.00	89.31	358.26	94.00	11070.96	4256.74	4256.75	0.23	4256.75425	0.00	0.71	SlimPulse	0
114	15151.00	89.21	357.79	95.00	11072.18	4351.69	4351.69	-3.04	4351.69071	359.96	0.51	SlimPulse	0
115	15245.00	89.28	357.30	94.00	11073.42	4445.60	4445.59	-7.07	4445.60045	359.91	0.52	SlimPulse	0
116	15339.00	89.24	356.85	94.00	11074.64	4539.48	4539.46	-11.86	4539.47988	359.85	0.48	SlimPulse	0
117	15434.00	89.55	358.21	95.00	11075.63	4634.39	4634.37	-15.96	4634.39595	359.80	1.47	SlimPulse	0
118	15528.00	89.17	359.03	94.00	11076.68	4728.36	4728.33	-18.22	4728.36951	359.78	0.96	SlimPulse	0
119	15619.00	89.04	0.69	91.00	11078.09	4819.35	4819.32	-18.45	4819.35516	359.78	1.83	SlimPulse	0
120	15689.00	89.04	0.69	70.00	11079.27	4889.33	4889.30	-17.61	4889.33664	359.79	0.00	SlimPulse Proj	7