

off
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A-3225N11W
Devon Nielson #1

SCIENTIFIC DRILLING INTERNATIONAL
MIDLAND, TEXAS

GIANT EXPLORATION & PRODUCTION

Wellname : GIANT EXPL. & PROD. DEVON NEILSON #1
Location : LOCATION
:
:
Date Surveyed : 10-10-90
Job No. : 32M1090171
Survey Performed By : JOHN OWENS

This survey is correct to the best of my knowledge
and is supported by actual field data.

..... COMPANY REPRESENTATIVE

SCIENTIFIC DRILLING INTERNATIONAL

Client : GIANT EXPLORATION & PRODUCTION
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Page 1 of 2
 Date 10-10-90
 Filename : GIANTDN1

No Interpolatio

MD	INC	DIR	TVD	+N/-S	+E/-W	VS	D'LEG
ft	deg	deg	ft	ft	ft	ft	°/100
364	0.00	N 0.00°E	364.00	0.00	0.00	0.00	0.0
437	1.00	S73.00°W	437.00	-0.19	-0.61	0.32	1.4
527	1.50	S62.00°W	526.97	-0.97	-2.40	1.48	0.6
617	1.50	S33.00°W	616.95	-2.51	-4.08	3.36	0.8
710	1.50	S59.00°W	709.91	-4.16	-5.79	5.35	0.7
804	1.50	S60.00°W	803.88	-5.41	-7.91	7.05	0.0
898	1.50	S73.00°W	897.85	-6.38	-10.15	8.50	0.4
991	1.00	S37.00°W	990.83	-7.39	-11.80	9.85	1.0
1085	0.75	S46.00°W	1084.82	-8.47	-12.74	11.12	0.3
1179	0.75	S45.00°W	1178.81	-9.33	-13.62	12.15	0.0
1272	0.75	S48.00°W	1271.80	-10.17	-14.50	13.17	0.0
1366	1.00	S58.00°W	1365.79	-11.01	-15.65	14.25	0.3
1460	0.75	S53.00°W	1459.78	-11.82	-16.84	15.30	0.3
1554	1.00	S50.00°W	1553.77	-12.72	-17.96	16.43	0.3
1647	1.00	S46.00°W	1646.76	-13.80	-19.16	17.76	0.1
1741	1.00	S42.00°W	1740.74	-14.98	-20.30	19.16	0.1
1835	1.25	S80.00°W	1834.72	-15.77	-21.86	20.28	0.8
1928	0.75	S43.00°W	1927.71	-16.39	-23.28	21.21	0.9
2022	0.75	S25.00°W	2021.70	-17.40	-23.96	22.34	0.2
2116	1.00	S58.00°W	2115.69	-18.39	-24.91	23.52	0.6
2209	1.25	S52.00°W	2208.67	-19.44	-26.40	24.88	0.3
2303	4.75	S38.00°W	2302.53	-23.14	-29.60	29.21	3.8
2397	8.00	S39.00°W	2395.94	-31.30	-36.12	38.62	3.5
2490	7.75	S35.00°W	2488.06	-41.46	-43.79	50.25	0.6
2584	9.00	S38.00°W	2581.06	-52.45	-51.95	62.79	1.4
2678	9.75	S38.00°W	2673.80	-64.51	-61.38	76.67	0.8
2772	10.50	S37.00°W	2766.34	-77.63	-71.43	91.71	0.8
2865	11.50	S37.00°W	2857.63	-91.80	-82.11	107.92	1.1
2959	13.00	S 4.00°W	2949.59	-109.85	-88.50	126.94	7.5
3053	13.00	S 5.00°W	3041.19	-130.93	-90.15	147.86	0.2
3146	13.50	S 5.00°W	3131.71	-152.17	-92.01	168.96	0.5
3240	14.00	S 4.00°W	3223.02	-174.44	-93.76	191.06	0.6
3334	14.00	S 4.00°W	3314.22	-197.12	-95.35	213.52	0.0
3427	14.50	S 4.00°W	3404.36	-219.96	-96.95	236.13	0.5
3521	16.00	S 4.00°W	3495.05	-244.62	-98.67	260.55	1.6
3615	14.50	S 3.00°W	3585.74	-269.30	-100.19	284.94	1.6
3708	14.75	S 3.00°W	3675.72	-292.75	-101.42	308.06	0.3
3802	15.50	S 3.00°W	3766.47	-317.24	-102.70	332.22	0.8
3896	14.50	S 3.00°W	3857.26	-341.54	-103.98	356.18	1.1
3989	14.50	S 3.00°W	3947.30	-364.79	-105.19	379.11	0.0

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No Interpolatio

MD	INC	DIR	TVD	+N/-S	+E/-W	VS	D'LEG
ft	deg	deg	ft	ft	ft	ft	°/100
4083	12.00 S	2.00°W	4038.79	-386.31	-106.15	400.29	2.7
4177	10.75 S	2.00°W	4130.94	-404.84	-106.80	418.49	1.3
4271	10.00 S	2.00°W	4223.40	-421.76	-107.39	435.11	0.8
4364	9.00 S	2.00°W	4315.13	-437.10	-107.92	450.17	1.1
4458	8.50 S	2.00°W	4408.03	-451.39	-108.42	464.21	0.5
4552	8.50 S	2.00°W	4501.00	-465.28	-108.91	477.85	0.0
4645	8.00 S	3.00°W	4593.04	-478.61	-109.49	490.97	0.6
4740	5.25 S	3.00°W	4687.40	-489.55	-110.06	501.76	2.9
4833	5.00 S	3.00°W	4780.02	-497.85	-110.50	509.94	0.3
4926	5.00 S	3.00°W	4872.67	-505.94	-110.92	517.93	0.0
5020	4.00 S	3.00°W	4966.38	-513.31	-111.31	525.19	1.1

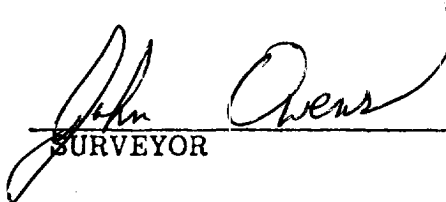
Origin of Bottom Hole Closure PLATFORM CENTRE
 Bottom Hole Closure 525 ft S12.23°W

SCIENTIFIC DRILLING INTERNATIONAL

SURVEY CERTIFICATION

COMPANY Giant Exploration WELL NO. Devon Nielson #1
DATE 3/12/91 LOCATION San Juan County, New Mexico
TYPE OF SURVEY Mult. Shot FROM 364' TO 5020'

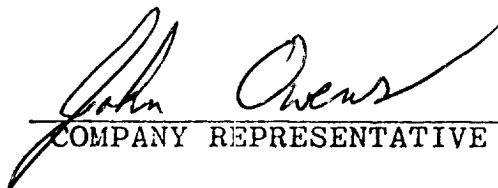
THE ABOVE SURVEY WAS PERFORMED BY ME ON 10-10-90
THE RESULTS OBTAINED FROM ACTUAL FIELD DATA CONFORM TO ESTABLISHED
STANDARDS AND ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.



SURVEYOR

FILM TRANSFER RECEIPT

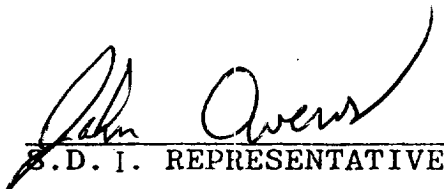
I HEREBY ACKNOWLEDGE RECEIPT OF ORIGINAL FILM OBTAINED ON THE ABOVE
SURVEY.



COMPANY REPRESENTATIVE

SURVEY CONFIRMATION

I HAVE EXAMINED THE ABOVE SURVEY AND FOUND THE DATA AND RESULTS
ACCEPTABLE ACCORDING TO CURRENT SCIENTIFIC DRILLING INT'L'S
STANDARDS.



S.D.I. REPRESENTATIVE

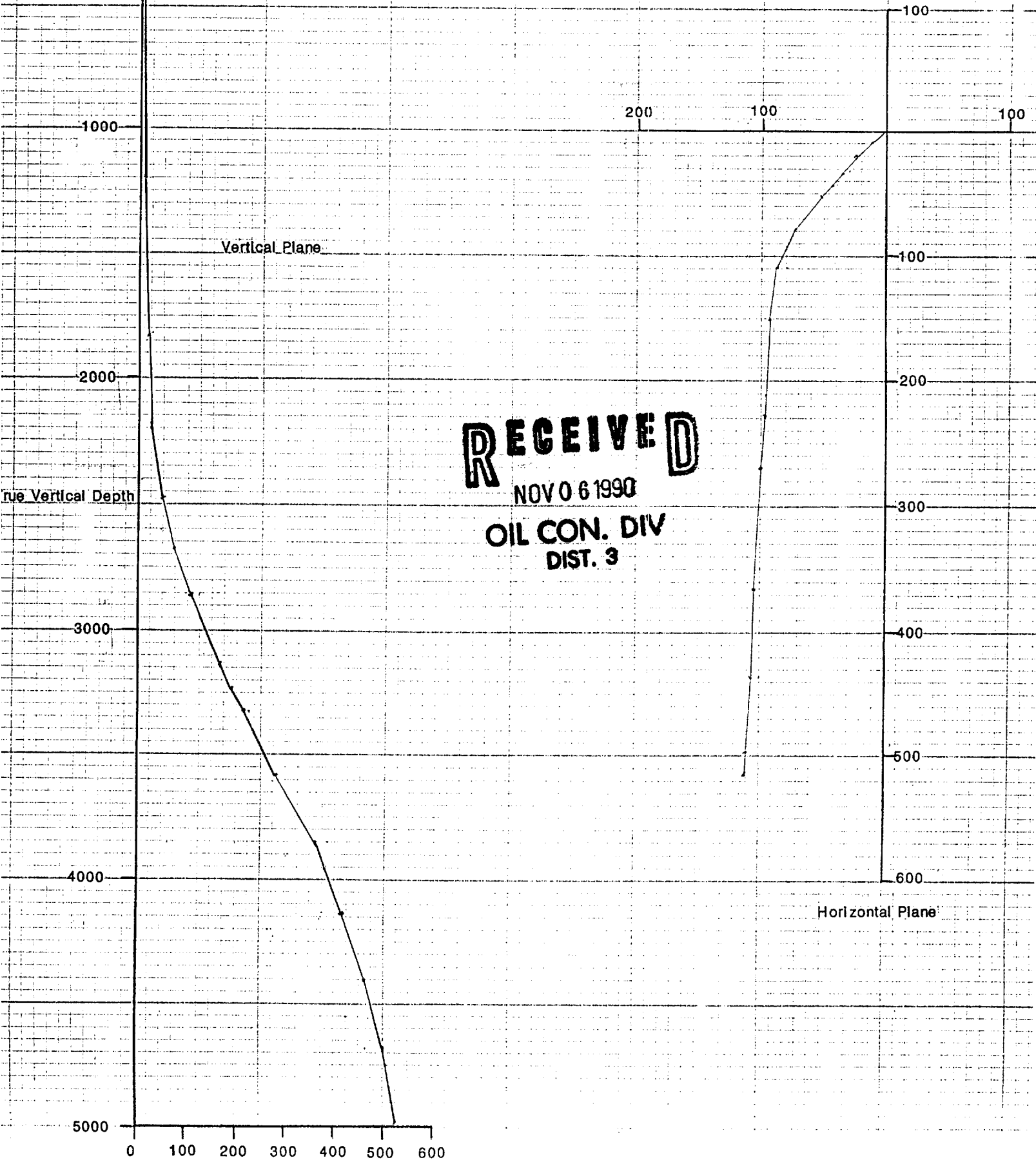
*Seen before me on this
12th day of March 1991*

*Margaret Jew
Exp 4-26-93*

Glant Exploration & Production Company

Devon Nielsen Well No. 1

CONFIDENTIAL



CONFIDENTIAL

Misc.	Measured Depth (ft)	Inclination Angle (Deg)	Direction	Course Length (ft)	Average Inclination (Rads)	Course Vertical Depth (ft)	True Vertical Depth (ft)	Course Departure (ft)
	0	0	0	0	0	0	0	0
	350	0	S53W	350	0	350	350	0
	788	1.25	S53W	438	0	438.0	788.0	4.8
	1117	1.25	S46W	329	0.02	328.9	1116.9	7.2
	1446	1.00	S42W	329	0.02	328.9	1445.8	6.5
	1822	1.00	S42W	376	0.02	375.9	1821.8	6.6
	2200	0.50	S80W	378	0.01	378.0	2199.7	4.9
	2288	3.50	S25W	88	0.03	87.9	2287.7	3.1
	2366	6.00	S35W	78	0.08	77.7	2365.4	6.5
	2431	7.25	S36W	65	0.12	64.6	2430.0	7.5
	2532	7.75	S35W	101	0.13	100.1	2530.1	13.2
	2647	8.50	S37W	115	0.14	113.8	2644.0	16.3
	2773	9.75	S37W	126	0.16	124.4	2768.4	20.0
	2868	11.25	S37W	95	0.18	93.4	2861.8	17.3
	2910	12.00	S25W	42	0.20	41.1	2902.9	8.5
	2942	13.00	S17W	32	0.22	31.2	2934.2	6.9
	2998	12.50	S5W	56	0.22	54.6	2988.8	12.4
	3186	12.50	S4W	188	0.22	183.5	3172.3	40.7
	3374	13.25	S4W	188	0.22	183.3	3355.6	41.9
	3622	14.25	S2W	248	0.24	240.9	3596.5	58.9
	3776	14.75	S3W	154	0.25	149.1	3745.6	38.6
	3901	14.50	S3W	125	0.26	120.9	3866.5	31.6
	4027	13.75	S3W	126	0.25	122.2	3988.7	30.7
	4182	11.00	S2W	155	0.22	151.4	4140.1	33.2
	4275	10.75	S2W	93	0.19	91.3	4231.5	17.5
	4557	9.00	S2W	282	0.17	277.8	4509.3	48.4
	4746	5.50	S2W	189	0.13	187.5	4696.8	23.9
	4932	5.25	S2W	186	0.09	185.2	4881.9	17.4
	5049	5.00	S2W	117	0.09	116.5	4998.5	10.5

Survey Azimuth (Deg)	Average Azimuth (Deg)	Average Azimuth (Rads)	North/South Course Coordinate	East/West Course Coordinate	North/South Total Coordinate	East/West Total Coordinate	Total Departure (ft)	Departure Direction (Deg)
0	0	0	0	0	0	0	0	0
233	117	2	0	0	0	0	0	0
233	233	4	-2.9	-3.8	-2.9	-3.8	4.8	53.0
226	229.5	4.01	-4.7	-5.5	-7.5	-9.3	11.9	50.9
222	224	3.91	-4.6	-4.5	-12.2	-13.8	18.4	48.5
222	222	3.87	-4.9	-4.4	-17.1	-18.2	24.9	46.8
260	241	4.21	-2.4	-4.3	-19.5	-22.5	29.7	49.1
205	232.5	4.06	-1.9	-2.4	-21.3	-24.9	32.8	49.4
215	210	3.67	-5.6	-3.2	-26.9	-28.1	38.9	46.3
216	215.5	3.76	-6.1	-4.4	-33.0	-32.5	46.3	44.5
215	215.5	3.76	-10.7	-7.7	-43.8	-40.2	59.4	42.5
217	216	3.77	-13.1	-9.6	-56.9	-49.7	75.6	41.1
217	217	3.79	-16.0	-12.0	-72.9	-61.7	95.5	40.3
217	217	3.79	-13.8	-10.4	-86.7	-72.2	112.8	39.8
205	211	3.68	-7.3	-4.4	-93.9	-76.5	121.2	39.2
197	201	3.51	-6.5	-2.5	-100.4	-79.0	127.8	38.2
185	191	3.33	-12.1	-2.4	-112.5	-81.4	138.9	35.9
184	184.5	3.22	-40.6	-3.2	-153.1	-84.5	174.9	28.9
184	184	3.21	-41.8	-2.9	-194.9	-87.5	213.6	24.2
182	183	3.19	-58.9	-3.1	-253.8	-90.6	269.4	19.6
183	182.5	3.19	-38.5	-1.7	-292.3	-92.2	306.5	17.5
183	183	3.19	-31.5	-1.7	-323.8	-93.9	337.1	16.2
183	183	3.19	-30.7	-1.6	-354.5	-95.5	367.1	15.1
182	182.5	3.19	-33.2	-1.4	-387.7	-96.9	399.6	14.0
182	182	3.18	-17.5	-0.6	-405.2	-97.6	416.8	13.5
182	182	3.18	-48.3	-1.7	-453.6	-99.2	464.3	12.3
182	182	3.18	-23.8	-0.8	-477.4	-100.1	487.8	11.8
182	182	3.18	-17.4	-0.6	-494.8	-100.7	505.0	11.5
182	182	3.18	-10.4	-0.4	-505.3	-101.1	515.3	11.3

Top of Pay Zone: 393' FNL, 419' FEL of Section Lines
Bottom Hole Location: 410' FNL, 420' FEL of Section Lines

Coordinates: Negative values are South and West