

\*\*\* G R I prati39 DIRECTIONAL WELL SURVEY \*\*\*

Vertical section calculated in plane of proposal  
 Direction : N 80 W

\*\* 1\*\*

Date: 09/17/84

MEASURED DEPTH feet	DRIFT ANGLE deg.min	DRIFT DIRECTION deg	COURSE LENGTH feet	TRUE VERT. DEPTH feet	RECTANGULAR COORDINATES feet	SEC-TION feet	DOGLEG SEVERITY dg/100ft
0	0 0	0	0	0.00	0.00 0.00	0.00	0.00
116	0 30	n 67w	116	116.00	0.20N 0.47W	0.49	0.43
282	0 45	n 57w	166	281.99	1.05N 2.06W	2.22	0.17
349	1 0	n 62w	67	348.98	1.57N 2.95W	3.17	0.39
440	1 0	n 56w	91	439.97	2.39N 4.31W	4.66	0.12
529	1 0	n 64w	89	528.95	3.16N 5.65W	6.12	0.16
619	1 45	n 67w	90	618.93	4.06N 7.62W	8.21	0.84
714	2 0	n 62w	95	713.88	5.40N 10.42W	11.20	0.31
807	3 15	n 62w	93	806.78	7.40N 14.18W	15.25	1.34
901	3 30	n 54w	94	900.62	10.33N 18.88W	20.38	0.57
995	4 15	n 56w	94	994.40	13.97N 24.08W	26.14	0.81
1089	4 0	n 57w	94	1088.16	17.70N 29.72W	32.34	0.28
1183	4 0	n 49w	94	1181.93	21.65N 34.96W	38.18	0.59
1275	4 45	n 53w	92	1273.66	26.07N 40.41W	44.32	0.88
1367	5 0	n 51w	92	1365.33	30.88N 46.57W	51.23	0.33
1461	5 15	n 53w	94	1458.95	36.05N 53.19W	58.64	0.33
1555	5 45	n 53w	94	1552.52	41.47N 60.38W	66.67	0.53
1646	6 0	n 51w	91	1643.04	47.21N 67.72W	74.89	0.36
1740	6 0	n 52w	94	1736.53	53.32N 75.41W	83.53	0.12
1834	6 0	n 48w	94	1830.01	59.64N 82.94W	92.04	0.44
1958	6 15	n 51w	124	1953.30	68.23N 93.00W	103.44	0.33
2052	6 30	n 48w	94	2046.72	75.01N 100.94W	112.43	0.44
2143	6 45	n 53w	91	2137.12	81.69N 109.04W	121.57	0.69
2237	7 0	n 55w	94	2230.44	88.30N 118.14W	131.68	0.37
2359	7 15	n 56w	122	2351.50	96.87N 130.61W	145.45	0.23
2520	8 0	n 53w	161	2511.07	109.28N 148.00W	164.73	0.53
2612	8 45	n 51w	92	2602.09	117.53N 158.56W	176.56	0.87
2711	9 0	n 56w	99	2699.91	126.61N 170.84W	190.23	0.82
2772	8 30	n 58w	61	2760.20	131.67N 178.62W	198.77	0.96
2864	8 30	n 49w	92	2851.19	139.76N 189.55W	210.94	1.44
2909	9 0	n 50w	45	2895.66	144.20N 194.76W	216.84	1.16
2940	8 15	n 55w	31	2926.31	147.03N 198.45W	220.97	3.42
2971	7 45	n 60w	31	2957.01	149.35N 202.09W	224.95	2.76
3002	7 15	n 68w	31	2987.75	151.12N 205.72W	228.84	3.73
3033	6 45	n 75w	31	3018.51	152.32N 209.31W	232.58	3.19
3064	6 30	n 81w	31	3049.31	153.07N 212.81W	236.15	2.37
3095	6 30	n 88w	31	3080.11	153.40N 216.30W	239.65	2.56
3157	6 15	s 75w	62	3141.72	152.62N 223.14W	246.25	3.06
3251	6 15	s 75w	94	3235.17	149.97N 233.02W	255.53	0.00
3344	6 15	s 78w	93	3327.61	147.61N 242.87W	264.81	0.35

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Date: 09/17/84

MEASURED DEPTH feet	DRIFT ANGLE deg. min		DRIFT DIRECTION deg	COURSE LENGTH feet	TRUE VERT. DEPTH feet	RECTANGULAR COORDINATES feet		SEC-TION feet	DOGLEG SEVERITY dg/100ft
3504	6	45	s 78w	160	3486.59	143.84N	260.58W	281.60	0.31
3656	7	0	s 78w	152	3637.49	140.06N	278.38W	298.47	0.16
3780	7	0	s 80w	124	3760.57	137.18N	293.22W	312.58	0.20
3921	6	30	s 80w	141	3900.59	134.30N	309.54W	328.16	0.36
4000	7	0	s 83w	79	3979.04	132.93N	318.72W	336.96	0.77
4088	7	0	s 83w	88	4066.39	131.62N	329.37W	347.22	0.00
4183	7	45	s 88w	95	4160.60	130.66N	341.52W	359.02	1.04
4278	8	15	s 88w	95	4254.68	130.20N	354.74W	371.96	0.53
4314	9	0	s 88w	36	4290.27	130.01N	360.13W	377.24	2.08
4355	9	30	s 88w	41	4330.74	129.78N	366.72W	383.68	1.22
4384	10	45	s 85w	29	4359.28	129.47N	371.81W	388.64	4.68
4413	10	15	n 85w	29	4387.80	129.47N	377.09W	393.84	6.51
4444	9	15	n 86w	31	4418.35	129.88N	382.32W	399.07	3.27
4476	8	15	n 86w	32	4449.98	130.22N	387.18W	403.91	3.13
4507	7	15	n 86w	31	4480.70	130.52N	391.35W	408.07	3.23
4539	6	15	n 86w	32	4512.47	130.78N	395.10W	411.81	3.13
4560	5	15	n 84w	21	4533.37	130.96N	397.20W	413.91	4.86
4651	4	45	s 84w	91	4624.02	130.96N	405.13W	421.72	1.27
4739	4	45	n 85w	88	4711.72	130.90N	412.42W	428.88	1.03
4842	5	0	n 87w	103	4814.35	131.51N	421.15W	437.59	0.29
4960	5	30	n 87w	118	4931.85	132.07N	431.93W	448.30	0.42
5105	6	15	s 88w	145	5076.09	132.20N	446.77W	462.94	0.63
5231	6	15	s 86w	126	5201.34	131.49N	460.47W	476.31	0.18
5355	6	15	s 89w	124	5324.60	130.90N	473.96W	489.49	0.27
5474	6	45	n 90w	119	5442.84	130.78N	487.43W	502.73	0.43
5587	6	30	s 88w	113	5555.08	130.55N	500.46W	515.53	0.30
5697	6	30	s 88w	110	5664.38	130.12N	512.91W	527.71	0.00
5806	7	0	n 86w	109	5772.62	130.34N	525.72W	540.36	0.79
5944	7	0	s 85w	138	5909.59	130.19N	542.53W	556.90	0.79
6069	6	30	s 89w	125	6033.73	129.42N	557.21W	571.22	0.55
6279	6	45	n 84w	210	6242.32	130.48N	581.41W	595.24	0.40
6414	7	45	s 86w	135	6376.25	130.78N	598.45W	612.06	1.19
6500	7	45	n 80w	86	6461.46	131.39N	610.03W	623.57	2.19
6624	8	0	n 82w	124	6584.29	134.04N	626.81W	640.56	0.30
6779	8	15	n 82w	155	6737.74	137.09N	648.50W	662.45	0.16
6937	9	30	n 82w	158	6893.84	140.48N	672.64W	686.82	0.79
7031	9	30	n 83w	94	6986.55	142.51N	688.02W	702.32	0.18
7188	10	0	n 82w	157	7141.29	145.98N	714.38W	728.88	0.34
7251	10	30	n 81w	63	7203.28	147.64N	725.47W	740.08	0.84
7348	11	15	n 77w	97	7298.54	151.13N	743.43W	758.38	1.10

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Date: 09/17/84

MEASURED DEPTH feet	DRIFT ANGLE deg.min	DRIFT DIRECTION deg	COURSE LENGTH feet	TRUE VERT. DEPTH feet	RECTANGULAR COORDINATES feet	SEC-TION feet	DOGLEG SEVERITY dg/100ft
7442	11 45	n 76w	94	7390.65	155.50N 761.66W	777.09	0.57
7537	12 0	n 71w	95	7483.62	161.06N 780.40W	796.51	1.11
7626	11 45	n 74w	89	7570.71	166.56N 797.87W	814.67	0.75
7760	12 0	n 78w	134	7701.85	173.23N 824.62W	842.18	0.64
7885	13 0	n 80w	125	7823.88	178.40N 851.18W	869.23	0.87
<sup>115</sup> / <sub>2</sub> 8000 93 8009	14 0	n 79w	124	7944.46	183.67N 879.64W	898.17	0.83
8137	14 0	n 81w	128	8068.66	189.05N 910.14W	929.14	0.38
-8264	13 45	n 77w	127	8191.95	194.86N 940.03W	959.59	0.78
8327	13 15	n 74w	63	8253.21	198.54N 954.27W	974.25	1.37
8454	13 45	n 72w	127	8376.70	207.21N 982.62W	1003.68	0.54
8580	13 30	n 73w	126	8499.15	216.14N 1010.93W	1033.10	0.27

Closure distance : 1033.78 feet.  
 angle : N 77 deg 55 min W

\*\*\*\* E N D O F R E P O R T \*\*\*\*

\*\*\* G R I prati39 DIRECTIONAL WELL SURVEY \*\*\*

Vertical section calculated in plane of proposal  
 Direction : N 80 W

\*\* 1\*\*

Date: 09/18/84

MEASURED DEPTH feet	DRIFT ANGLE deg. min	DRIFT DIRECTION deg	COURSE LENGTH feet	TRUE VERT. DEPTH feet	RECTANGULAR COORDINATES feet	SEC- TION feet	DOGLEG SEVERITY dg/100ft
8327	13 15	n 74w	63	8253.21	198.54N 954.27W	974.25	1.37
8454	13 45	n 72w	127	8376.70	207.21N 982.62W	1003.68	0.54
8580	13 30	n 73w	126	8499.15	216.14N 1010.93W	1033.10	0.27
8708	13 30	n 72w	128	8623.62	225.12N 1039.43W	1062.73	0.18
8803	13 30	n 72w	95	8715.99	231.97N 1060.52W	1084.69	0.00

Closure distance : 1085.60 feet.  
 angle : N 77 deg 39 min W

\*\*\*\* E N D O F R E P O R T \*\*\*\*

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GEO Operator Corporation  
WIRELINE SURVEY

Well Name Prati #39  
 Date September 4, 1986  
 Well Status Air Pack  
 Elevation \_\_\_\_\_  
 Casing Size & Depth 16" - 2187'  
 Liner Size & Depth 11-3/4" 2187-6253  
 Liner Size & Depth \_\_\_\_\_  
 Open Hole Size & Depth 9030 (TD)  
 Zero Point 27' Zero P.  
 Operator J.Adams & D.Donavin

Instrument Pressure  
 Range 0-725  
 Serial # 22492  
 Instrument Temperature  
 Range 113°F - 803°F  
 Serial # 28392  
 Clock Range 12 Hr.P; 12 Hr.T  
 Hang Time at Stops 20 Min.Surface  
 Time on Bottom 30 Min.@ 1000,2000,3000  
 Time off Bottom 20 Min. regular

DD

Survey Data

Time	Depth (Ft.)	Pressure (psia)	Temperature (°F)	Time	Depth (Ft.)	Pressure (psia)	Temperature (°F)
08:36	40	407	113	11:46	6000	476	470
08:46		407	113	11:56		476	470
09:18	1000	422	115	12:15	7000	484	474
09:28		422	115	12:25		484	474
09:38		422	118	12:40	8000	490	475
09:51	2000	434	165	12:50		490	475
10:01		434	180	13:07	8099	501	479
10:11		434	185	13:17		501	479
10:27	3000	444	249	13:27		501	479
10:37		444	254	13:58	40	410	113
10:47		444	254	14:08		410	113
11:00	4000	458	330				
11:10		458	331				
11:23	5000	469	465				
11:33		469	465				

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

TEMPERATURE DEPTH COMPARISON  
OF THERMOMETER RUNS

Prati 39		Prati 30		Prati 31	
<u>Depth</u>	<u>Temp</u>	<u>Depth</u>	<u>Temp</u>	<u>Depth</u>	<u>Temp</u>
3780'	180°F	3772'	164°F, 166°F	3873'	173°F
3921'	176°F	3867'	168°F, 170°F	3992'	182°F
4000'	180°F	3950'	175°F, 172°F		
4088'	176°F	4056'	171°F, 176°F	4124'	176°F
4183'	178°F	4119'	174°F, 176°F		
4278'	176°F	4182'	170°F, 178°F	4292'	190°F
		4312'	180°F, 184°F		
4560'	186°F	4502'	186°F	4546'	195°F, 192°F
4651'	182°F	4628'	186°F	4693'	190°F, 186°F
4842'	184°F, 188°F	4880'	196°F, 198°F	4885'	198°F, 196°F
4960'	188°F	4976'	188°F, 190°F		
5105'	198°F	5164'	192°F	5068'	195°F, 196°F
5231'	198°F	5284'	204°F, 206°F	5132'	195°F
5355'	206°F, 208°F	5392'	204°F, 208°F	5319'	191°F
5474'	210°F, 208°F	5411'	202°F, 204°F	5396'	204°F
5587'	208°F, 206°F	5461'	198°F, 196°F	5418'	200°F
5697'	210°F, 208°F	5523'	227°F, 229°F	5481'	205°F
5806'	204°F, 206°F	5621'	208°F, 210°F	5511'	198°F
5944'	212°F, 208°F	5723'	210°F, 206°F	5573'	208°F
		5897'	216°F, 212°F	5615'	207°F
		5976'	210°F, 212°F	5669'	206°F
				5723'	212°F, 214°F

(Casing Point at 5996')

(Casing Point at 5723')